



**The International
School of Bombay**

NURTURE • CHALLENGE • SUCCESS

Summer Holiday Homework (2026-27)

Submission Date [13-07-2026 (Monday)]

Class – XII Commerce

Dear Parents,

Greeting!

Wishing you a happy summer! May the good sunshine of this season fill your life with glee and glow and bring your heart and laughter.

Here are a few assignment to encourage your child to explore thing, engage in learning and learning by doing. The sun is high and hot,

And the days are long and bright,

The summer season's here,

And it fills me with delight.

The air is filled with laughter,

And the breeze is warm and light, The world is full of wonder,

In this season of pure delight,

So let's soak up every moment, Of this season bright and clear, And cherish is all the memories, That will last throughout the year.

Regards, The International School of Bombay

Dear Students,

Your summer holidays are about to begin, and they should be fun-filled, refreshing, and meaningful. Summer vacations are important because they give you a break from your regular school routine and help you relax, explore new things, and spend quality time with your family.

During these holidays, try to learn something new and useful, such as a hobby, a creative activity, or a life skill. You can read interesting books, help your parents at home, and enjoy indoor games that make you happy and active.

At the same time, take care of your health. Avoid going out in the hot sun during the afternoon. Drink plenty of water to stay hydrated and eat healthy food. Follow a simple daily routine so that you remain active and fresh. Remember to complete your holiday homework regularly. Do a little work everyday instead of leaving everything for the last moment. This will help you learn better and enjoy your holidays without stress.

Happy Summer Holidays!

Regards, The International School of Bombay

General Instructions

- 1.All the assignments has to be done neatly and correctly.
- 2.It is mandatory for all students to complete the holiday homework.
- 3.Date of submission of holiday home work : 13/07/2026

ENGLISH

INSTRUCTIONS FOR MAKING THE PROJECT

- The marks allotted for ENGLISH PROJECT: 10 marks
- The portfolio of project may include all the points given in each project.
- The project must contain at least 15-20 sheets.
- Use as many pictures /photographs as you require.
- Use sketch pens for headings and coloured pens for content.
- Use A4 size coloured/designer paper sheets for the project and after compiling everything it should be submitted in the spiral binding.

NOTE: THE PROJECT SHOULD BE HANDWRITTEN

Acknowledgement

I would like to extend my sincere and heartfelt obligation towards all those who have helped me in making this project. Without their active guidance, help, cooperation and encouragement, I would not have been able to present the project on time.

I am extremely thankful and pay my sincere gratitude to my subject teacher_for her/him valuable guidance and support for the completion of this project.

I also acknowledge with a deep sense of reverence, my gratitude towards my Principal, parents, other faculty members of the school and friends for their valuable suggestions given to me in completing the project.

Date:

Place:

CERTIFICATE

This is to certify that the project work on _____based on the curriculum of CBSE has been completed by _____ of Class XII .

The above-mentioned project work has been completed under my guidance during the academic year 2026-27.

Signature of the Principal

Signature of the Subject Teacher

(Select ANY ONE of the following topics)

LIST OF TOPICS/THEMES

1. THE LAST LESSON- FREEDOM OF SPEECH AND EXPRESSION

Linguistic chauvinism

Importance of Language

Globalization of Language

Franco-Prussian War

Historical References of Events wherein linguistic identity was threatened /snatched.

2. LOST SPRING - LIFE IN A SLUM Research and case study of a slum.

Life of the people in a slum

Education

Health and Infrastructure

Government Initiatives

Role of youth in the upliftment of the weaker sections of the society

Comparative Study of Slums

Slums of yesterday turned to cities of today.

3. DEEP WATER- PHOBIA

Phobias and fears of people.

Psychological and emotional impact.

How to overcome.

Impact on one's life and society

4. RATRAP - THE STUDY OF CRIME AND CRIMINALS

Circumstances that lead to crime.

Corrective Measures

Impact of Criminal Behaviour on Society How to bring them into mainstream.

Attitude of society towards criminals.

5. INDIGO (INDIGO SHARE CROPPING)

Condition of Farmers in Champaran-Then and Now

Farm Bill Agitation

Gandhi's Contribution

Other Political Leaders who brought about a change in the lives of farmers.

Farmer Protection Laws in India

Condition of Farmers in India vis-a-vis world.

Future Prospects-Growth-Suggestions

6. THE ENEMY- WAR AND PEACE

To maintain peace we need to go to war.

Impact of War on Society

Predicament of War

Escapism and Depression due to war.

Stance of the Political Lobby and Civilians

7. ON THE FACE OF IT- DISABILITY

Coping with disability

Society's attitude toward disability

Struggles of a disabled person

Laws for the disabled

Government policies for the betterment of the disabled.

Need of inclusion of the disabled in the mainstream society.

MY MOTHER AT SIXTY SIX – PLIGHT OF OLD AGED PEOPLE

About the Poetess (with photos)

8. Poetess'

Personal Experience - Common Paradox of Human Relationship
Portrayal of Sensational Separation Between a Mother and a Daughter

Plight of Old Aged People: Ugly Truth about Old Age (with photos)

Reasons Behind the Need of Old Age Homes

Respect for Elderly Parents

Efforts for Stress-Free and Secured Life of Aged People

Visit to an Old Age Home (photos of some aged people living in such homes)

Positive and Negative Opinions of Aged People Living in Old Age Homes

How to Strike a Balance Between Duties and Responsibilities of Children and Society

Data Regarding Miserable State of Old Age People

Role of Youth to Improve the Plight of Aged People

9. A THING OF BEAUTY – A THING OF BEAUTY AND IT'S ROLE IN HUMAN LIFE

About author John Keats (With Pictures)

Different characteristics of nature like its eternal, changeless, perfect source of

true happiness, etc.) (beautiful pictures of Nature) Comparison of human life and Nature For example:

HUMAN	NATURE
Change	Changeless
Mortal	Immortal
Death & Decay	Eternal

Description of beautiful things in nature like

- Rivers: Symbol of excitement, adventure, healing, never ending supply of life...
- Sun: equality, light, hope royalty, divinity, positivity power..
- Trees: lively, wisdom, prosperity, transformation...
- Animals: divine, moving, growing, fertility, happiness, elegance, strength, energy, wisdom....

• Flowers: purity, hope, beautiful, innocence, humility, youthful....
Beauty of Mighty dead: Stories of Saints and sages, their work, and deeds, how they immortalized themselves ' Any 10 quotes related to the beauty of Nature

PROJECT LAYOUT

SHEET 1- Cover Page with title, school details, details of students

SHEET 2-Statement of purpose/ Objective/ Goal

SHEET 3- Certificate of Completion under the guidance of the teacher.

SHEET 4- Action Plan

3-4 lines about the project.

Research Tools and Methodology.

Supporting Material-AV Aids/ PPT

SHEET 5- Introduction of the Project.

SHEET 6- Body of the Project

Supporting Material

Questionnaire

Case Study

Assignments

Survey Report

Transcripts

Articles

Interview

SHEET 7- REPORT 800-1000 words essay/script/report

SHEET 8- STUDENT/GROUP REFLECTION

100-150 words paragraph about the experience and learning outcomes

SHEET 9- PHOTOGRAPHS

SHEET 10- LIST RESOURCES/ BIBLIOGRAPHYY

PARAMETERS OF ASSESSMENT

Quality of Content

Accuracy of Information

Adherence to the specified timeline.

Content in respect of spellings, grammar, punctuation

Clarity of thoughts and ideas

Creativity

Contribution by group members

Knowledge and experience gained

Accountancy

Project Format

 Must Include:

- Cover Page
- Acknowledgement
- Certificate
- Index
- Introduction
- Objectives
- Main Content (Project Work)
- Conclusion
- Bibliography

Important Instructions

- Project must be handwritten
- Use proper headings and neat presentation
- Use diagrams, tables, and charts
- Avoid copying directly (no plagiarism)
- Keep project well-organized and creative

Project work

- Comparative and common size financial statements
- Accounting Ratios
- Segment Reports
- Cash Flow Statements

1	Amrita Yadav	Reliance Industries Limited
2	Ansh soni	Tata Consultancy Services
3	Anurag patil	Infosys Limited
4	Arisha khan	HDFC Bank
5	Astha neema	State Bank of India
6	Avi Nagar	ICICI Bank
7	Ayush seetlaani	Wipro Limited
8	Azmi fatima	Hindustan Unilever Limited
9	Azlefa Noor	Adani Enterprises Limited
10	Bhavya M jain	Maruti Suzuki India Limited
11	Bhavya s jain	Cipla
12	Dhairya paliwal	Divi's Laboratories
13	Fareen khan	TCS

14	Harsh jaiswal	Axis Bank
15	Harshit solanki	Kotak Mahindra Bank
16	Jeet sajnani	IndusInd Bank
17	Kartika khandare	Bajaj Finance
18	Lucky Thakur	LIC Housing Finance
19	Mo. Ali Shaikh	ONGC (Oil and Natural Gas Corporation)
20	Mo. Mateen	Indian Oil Corporations
21	Mo. Sarfaraz Ansari	Bharat Petroleum
22	Mo. Yasin khan	NTPC Limited
23	Nikit kapoor	Power Grid Corporation of India
24	Nitya Patidar	Tata Motors
25	Om jain	Mahindra & Mahindra
26	Parth Mittal	Hero MotoCorp
27	Pawan lohar	Bajaj Auto
28	Poorav sharma	Larsen & Toubro
29	Pranav s chouhan	Asian Paints

30	Rajveer Saluja	UltraTech Cement
31	Riya Rohida	JSW Steel
32	Ronak mandloi	Tata Steel
33	Rudraksh	HCL Technologies
34	Saad ullah	Tech Mahindra
35	Sarvesh kacholiya	Bharti Airtel
36	Shraddha Birthare	ITC Limited
37	Tanya Sharma	Nestlé India
38	Tirth mandora	Dabur India
39	Vaishnavi Pandey	Godrej Consumer Products
40	Vanshika chouhan	Sun Pharmaceutical Industries
41	Yashfeen Shaikh	Dr. Reddy's Laboratories

E-Ship

A) Business Plan

- Create a startup idea
- Prepare a complete business plan
- Should include:
 - Product/Service description
 - Target market
 - Marketing strategy
 - Financial plan (cost, profit, BEP)
 - Organizational structure

(B) Market Survey

Conduct survey (primary/secondary data) Include:

- Questionnaire
- Data collection
- Analysis (graphs/diagrams)
- Conclusion & suggestions

Objectives of Project Work

CBSE focuses on practical learning, not theory only:

- Develop entrepreneurial skills
- Improve decision-making & creativity
- Learn data collection & analysis
- Build confidence & leadership
- Understand real business environment

Format of Project File

Your file should be neat, well-organized, and systematic:

Basic Structure:

- Cover Page
- Acknowledgement
- Certificate
- Index
- Introduction
- Objectives
- Research Methodology
- Data Analysis (tables/graphs)
- Findings
- Conclusion
- Bibliography

Important Instructions by CBSE

- Project must be original (no copying)
- Use real data wherever possible
- Include charts, diagrams, graphs
- Maintain proper presentation
- Submit on time (strict deadlines followed)

1	Amrita yadav	Clay utensils
2	Arisha khan	Home made candles and soap
3	Azmi fatima	health tracking ring
4	Shraddha birthare	Smart water bottle
5	Nitya Patidar	Sustainable Scrunchies from Fabric Waste
6	Riya Rohida	Digital reminder applications for the student
7	Fareen khan	Portable Mini Whiteboard Folder
8	Kartika khandare	Convertible clothing
9	Bhavya M jain	Multipurpose charging station
10	Pawan lohar	Voice to note pen for lecture
11	Poorav Sharma	Skill sharing app for students
12	Rudraksha choudhary	Vitamin infused flavoured water
13	Azlefa Noor	Solar powered study lamp
14	Mo. Sarfaraz Ansari	Biodegradable phone cover
15	Mo. Mateen khan	QR based notes sharing system for school
16	Prafull	Convertible school Bag
17	Ibrahim Khan	Rural water purification bottle
18	Jeet sajnani	Lost item tracker for school bag
19	Mo. Ali Shaikh	Anti Distraction study timer device
20	Sarvesh	Homemade Incense sticks

Economics

Economics Project Guidelines (Session 2026–27)

General Instructions

1. The project must be neat, well-organized, and handwritten (unless instructed otherwise).
2. Use blue/black ink; highlight headings with a different color.
3. Use A4 sheets and maintain proper margins on each page.
4. The project should be original. Avoid copying from guides or the internet.
5. Include relevant data, tables, graphs, and real-life examples.
6. Properly label all diagrams and statistical data.
7. Submit the project on time.
8. Be prepared to explain your project during viva.

◇ Project File Format

1. Cover Page

- Title of the Project (e.g., *"Poverty in India"*)
 - Student Name
 - Class & Section
 - Roll Number
 - School Name
 - Session (2026–27)
-

2. Acknowledgement

A short paragraph thanking the teacher and school for their guidance.

3. Certificate

As per school format (signed by subject teacher).

4. Index

List of contents with page numbers.

5. Introduction

- Meaning of the topic
 - Background and importance in the Indian economy
-

6. Objectives of the Project

- To understand the concept
 - To analyze real-life economic issues
 - To study recent trends/data
-

7. Main Content

Divide into clear headings such as:

- Meaning and Explanation
 - Causes / Components
 - Current Situation in India
 - Government Policies / Measures
 - Case Study or Real Data (graphs, tables)
-

8. Data Presentation

- Use charts, bar graphs, pie charts
 - Mention source of data (e.g., government reports, surveys)
-

9. Conclusion

- Key findings
 - Personal learning/understanding
-

10. Bibliography

- NCERT Book
 - Newspapers (like *The Hindu*, *Economic Times*)
 - Websites (mention properly)
-

◇ Presentation Tips

- Keep handwriting clean and readable
- Use headings and subheadings clearly
- Make the project visually appealing
- Add newspaper cuttings (optional but useful)

Topics

1	Amrita Yadav	Micro and Small-Scale Industries
2	Ansh Soni	Goods and Services Tax Act and its Impact on GDP
3	Anurag Patil	Human Development Index
4	Arisha khan	Government Budget and its components
5	Astha Neema	Exchange Rate determination-methods and techniques
6	Avi Nagar	Sarva Shiksha Abhiyan – Cost Ratio Benefits
7	Ayush Seetlani	Waste Management in India-Need of the hour
8	Azmi Fatima	Digital India-Step towards the future
9	Azlefa Noor	Aatmanirbhar Bharat
10	Bhavya M jain	Environmental Crisis
11	Bhavya s jain	National Education Policy 2020
12	Dhairya paliwal	Food Supply Channel in India
13	Fareen khan	Health expenditure (Madhya Pradesh)
14	Harsh jaiswal	Rain Water Harvesting
15	Harshit solanki	Organic Farming
16	Jeet sajnani	e-Rupee
17	Kartika khandare	Sustainable Development Goals (SDG's)
18	Lucky Thakur	Cashless Economy
19	Mo. Ali Shaikh	Role of RBI in control of credit
20	Mo. Mateen	Minimum Wage Rate-Approach and Application
21	Mo. Sarfaraz Ansari	Disinvestment policy of the Government
22	Mo. Yasin khan	Trends in credit availability in India
23	Nikit kapoor	Trends in Budgetary condition of India
24	Nitya Patidar	Monetary Policy Committee and its Functions
25	Om jain	Contemporary Employment Situation in India
26	Parth Mittal	Jan Dhan Yojana and its Impact
27	Pawan lohar	Inflation and its Causes
28	Poorav sharma	Unemployment in India
29	Pranav s Chauhan	Government programmes for poverty Removal
30	Rajveer Saluja	Green Revolution in India
31	Riya Rohida	Role of Service Sector in India
32	Ronak mandloi	Importance of Foreign Trade
33	Rudraksh	Imports and Exports of India
34	Saad Ullah	Consumer Awareness in India
35	Sarvesh kacholiya	Privatisation in India
36	Shraddha BIRTHARE	Money Supply in India
37	Tanya Sharma	Online Banking and its Uses
38	Tirth mandora	Role of Commercial Banks in Economic Development
39	Vaishnavi Pandey	Measures to control Inflation
40	Vanshika chouhan	Role of Central Bank in an Economy
41	Yashfeen Shaikh	Poverty in India

Business Studies

Business Studies Project Guidelines (2026–27)

General Instructions

1. The project must be neat, systematic, and preferably handwritten.
 2. Use A4 size sheets and maintain proper margins on each page.
 3. Write with blue/black ink; headings may be highlighted.
 4. The content must be original. Avoid direct copying from books or the internet.
 5. Include practical examples, case studies, and real-life business situations.
 6. Diagrams, charts, and tables should be neat and properly labeled.
 7. Projects must be submitted on time as per the teacher's instructions.
 8. Students should be ready for viva based on their project work.
-

Project File Format

1. Cover Page

- Title of the Project
 - Student's Name
 - Class & Section
 - Roll Number
 - School Name
 - Academic Session (2026–27)
-

2. Acknowledgement

A short paragraph expressing gratitude to the teacher and school for their guidance and support.

3. Certificate

As per the school format (signed by subject teacher).

4. Index

- List of contents/topics with page numbers.
-

5. Introduction

- Meaning of the topic
 - Importance in the business world
-

6. Objectives of the Project

- Purpose of selecting the topic
 - Expected learning outcomes
-

7. Research Methodology

- Sources of data (Primary/Secondary)
 - Tools used (survey, questionnaire, observation, etc.)
-

8. Main Content / Body

Organize content using clear headings:

- Concept Explanation
 - Features/Characteristics
 - Importance/Advantages
 - Real-life Examples or Case Study
 - Data Analysis (if applicable)
-

9. Findings & Analysis

- Key observations
 - Interpretation of collected data
-

10. Conclusion

- Summary of the project

- Learning outcomes and personal understanding

11. Bibliography

- Books (NCERT)
- Newspapers/Magazines
- Websites (properly cited)

◆ Presentation Tips

- Maintain neat and legible handwriting
- Use proper spacing and alignment
- Add relevant pictures, logos, and diagrams
- Make the cover page attractive and creative

Topics

1	Amrita Yadav	Principal of Management
2	Ansh Soni	Stock Exchange
3	Anurag Patil	Elements of business environment
4	Arisha khan	Marketing Management of a product-Toothpaste
5	Astha Neema	Marketing Management of a Product-Milk
6	Avi Nagar	Consumer Right and Consumer protections
7	Ayush Seetlani	Leadership and Motivation
8	Azmi Fatima	Recruitment and selection process
9	Azlefa Noor	Training and Development
10	Bhavya M jain	Marketing – Peanut Butter
11	Bhavya s jain	Staffing: Concept and Importance
12	Dhairypaliwal	Elements of Directing
13	Fareen khan	Planning: Concept, Features and Importance
14	Harsh jaiswal	Types of Plans(Objectives, policies and procedures)
15	Harshit solanki	Marketing Management of a product-Noodles
16	Jeet sajnani	Impact of Government Policies
17	Kartika khandare	Liberalisation, privatization and Globalisation
18	Lucky Thakur	Business Environment: Meaning and features

19	Mo. Ali Shaikh	Marketing Management of a product-Honey
20	Mo. Mateen	Level of Management
21	Mo. Sarfaraz Ansari	Marketing Management of a product-Mustard Oil
22	Mo. Yasin khan	Marketing Management of a product-Cold Cream
23	Nikit kapoor	Techniques of Scientific Management
24	Nitya Patidar	Marketing Management of a product-Soap
25	Om jain	Marketing Management of a product-Sunscreen
26	Parth Mittal	Coordination: Nature and Importance
27	Pawan lohar	Financial Management: Objectives and Importance
28	Poorav sharma	Financial Decisions-Investment Decision
29	Pranav s Chauhan	Money Market Instrument
30	Rajveer Saluja	Marketing Management of a product-Sanitizer
31	Riya Rohida	Capital Market-Primary and Secondary Market
32	Ronak mandloi	Consumer Awareness and Consumer Movement in India
33	Rudraksh	Sales promotion Techniques
34	Saad Ullah	Role of Marketing in Economic Development
35	Sarvesh kacholiya	Product Life Cycle (Introduction,Growth,Maturity,Decline)
36	Shraddha Birthare	Marketing Management of a product-Lipstick
37	Tanya Sharma	Marketing Management of a Product-Moisturiser
38	Tirth mandora	Consumer Redressal Agencies (District, State and National Commission)
39	Vaishnavi Pandey	Marketing -Lip Gloss
40	Vanshika chouhan	Marketing Management of a Product-Fairness Cream
41	Yashfeen Shaikh	Marketing Management of a Product-Ice Cream

Applied Math

Write the following activities in your activity notebook.

Activity -1 To verify that the relation in the set L of all lines in a plane, defined by $R = \{ (l, m) : l \perp m \}$ is symmetric but neither reflexive nor transitive.

Activity -2 To verify that the relation in the set L of all lines in a plane, defined by $R = \{ (l, m) : l \text{ parallel to } m \}$ is an equivalence relation.

Activity -3 To demonstrate a function which is not one-to-one but is onto.

Activity -4 To draw the graph of $\sin^{-1}x$ using the graph of $\sin x$ and demonstrate the concept of mirror reflection (about the line $y=x$).

PE

1. PHYSICAL FITNESS TEST: SAI Khelo India test , Brockport Physical Fitness Test (BPFT) (SAI Khelo India History, Test 1. Pull-Ups (Boys)/ Flexed-Arm-Hang(Girls),Test 2. Bent-knee-Sit-Ups, Test 3. Shuttle Run, Test 4.Standing Long Jump/Standing Broad Jump, Test 5. 50m Dash , Test 6. 600m Run)
2. YOGIC PRACTICES (Procedure for asanas ,benefits and Contraindication for any three Asanas for each lifestyle disease.)
3. PROFICIENCY IN GAMES AND SPORTS (Skill of any one IOA recognised Sports\Games of choice)(History , Measurements and Specifications, Layout of ground, General Rules , Fundamental Skills, Terminology, Governing body, Important tournament, national Awardees)(*any one team game : football, Cricket, Basketball)

Computer Science

Python project Topics-

You can choose anyone topic as per your Choice.

1. school management system.
2. Attendance management system.
3. Library management system
4. Student management system
5. Traffic management system
6. Hotel Management System

1. Core Technical Requirements

Primary Language: The project must be developed using **Python** (preferably version 3.8

Database Connectivity: It is mandatory to use **MySQL** for data storage and retrieval (Python-SQL connectivity).

Complexity: The total coding length is typically expected to be between **500–1000 lines**, demonstrating modular programming with multiple functions and modules.

2. Essential Project File Structure

The documentation must be printed on A4 sheets, single-sided, and systematically organized in a spiral or channel file. [1, 4]

Section	Description
Cover Page	School name, logo, project title, student name, and CBSE Roll Number.
Certificate	Formal declaration signed by the subject teacher and principal.
Acknowledgement	Brief note thanking teachers and mentors.
Table of Contents	A numbered list of all sections with page numbers.

Synopsis	A brief (150–200 words) introduction, objective, and scope of the project.
Data Dictionary	Table structures, field names, data types, and primary keys.
Source Code	Well-commented Python code (avoid dark-themed/black background prints).
Output Screens	Coloured screenshots of all working menus and success messages.
Conclusion	Summary of findings and learning outcomes.
Bibliography	References to textbooks (like Preeti Arora or NCERT) and websites

Submission of file will be in hard copy in spiral or channel file.

Format of cs project is given below



SCHOOL NAME

SESSION:

Computer Science Investigatory Project



TOPIC: Library Management

Class: XII

Submitted by: Submitted to:

CERTIFICATE OF AUTHENTICITY

This is to certify that XYZ, a student of class XII has successfully completed the research project on the topic "Library Management" under the guidance of Mrs. Prachi Jain Mam during the year 2026-27 in partial fulfillment of the Computer Science practical examination conducted by CBSE. This project is absolutely genuine and does not indulge in plagiarism of any kind. The references taken in making this

Signature
(Subject
Teacher)

Signature
(Principal)

Signature
(External Examiner)

project have been declared at the end of this report.

ACKNOWLEDGEMENT

I would like to express my greatest gratitude to the people who have helped & supported me throughout my project. I am grateful to my teacher for her continuous support for the project, from initial advice & contacts in the early stages of conceptual inception & through ongoing advice & encouragement to this day. A special thank of mine goes to my best friend who helped me in completing the project. I wish to thank my parents for their undivided support and interest who inspired me and encouraged me to go my own way, without whom I would be unable to complete my project...

INDEX	Page No.
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Acknowledgement	3
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Objective and Scope	6
Functions and Modules	7
Detailed Description	10
Source Code	11
Outputs and Tables	17
Software and Hardware Requirements	28
Bibliography	29

INTRODUCTION

LIBRARY MANAGEMENT SYSTEM is also called an automated library system. It is defined as software that has been established to manage a basic house keeping function on of a library.

The electronic management via the software is essential to track informaion like issue date,submit date , due date who has borrowed anybook etc.. The system is developed and designed with an aim to facilitate effcient management to the schools to manage a modern library with accurate datamanagement. The software is intended toreduce the manual work to manage library functions which have various features.

Objective and Scope of the Project

- In computer system the person has to fill the various forms and numbers of copies of the forms can be easily generated at a time.
- It is not necessary to create the manifest but we can directly print it, which saves time.
- To assist the staff in capturing the effort spent on their respective working areas.
- To utilize the resources in an efficient manner by increasing their productivity through automation.
- The system generates types of information that can be used for various purposes.
- It satisfies the user requirement.
- Easy to understand by the user and operator.
- Easy to expand.
- Has a good user interface.
- Delivered on schedule within the budget.

FUNCTIONS AND MODULES

Modules:

```
import mysql.connector:
```

By importing this package, we are able to establish the connection between SQL and Python.

FUNCTIONS:

`connect():`

This function establishes connection between Python and MySQL

`cursor():`

It is a special control structure that facilitates the row-by-row processing of records in the result set.

The Syntax is:

`<cursor object>=<connection object>.cursor()`

`execute():`

This function is used to execute the sql query and retrieve records using python.

The syntax is:

`<cursor object>.execute(<sql query string>)`

`def():`

A function is a block of code which only runs when it is called.

`fetchall():`

This function will return all the rows from the result set in the form of a tuple containing the records.

`fetchone():`

This Function will return one row from the result set in the form of a tuple containing the records.

`commit():`

This function provides changes in the database physically.

DETAILED DESCRIPTION

❖) Our Project has 3 MySQL tables. These are: -

- 1.) Books
- 2.) Issue
- 3.) Return

1) The table Books contain the following columns:

- a) bname
- b) author
- c) bcode
- d) total
- e) subject

2.) The table Issue contain the following columns:

- a.) name
- b.) regno
- c.) bcode
- d.) issue_date

3.) The table Return contain the following columns:

- a.) name
- b.) regno
- c.) bcode
- d.) return_date

SOURCE CODE

For MySQL:

```
create database library_app;
```

```
use library_app;
```

```
create table books
```

```
(bname varchar(50),
```

```
author varchar(50),
```

```
bcode varchar(50),
```

```
total int(50),
```

```
subject varchar(50));
```

```
create table issue
```

```
(name varchar(50),
```

```
regno varchar(50),
```

```
bcode int(50),
```

```
issue_date varchar(50));
```

```
create table return
```

```
(name varchar(50),
```

```
regno varchar(50),
```

```
bcode int(50),
```

```
return_date varchar(50));
```

For Python:

```
import mysql.connector as a
con=a.connect(host='localhost',user='root',passwd='9586',data
base='library_app')
```

def addbook():

```
bn=input("Enter Book Name: ")
ba=input("Enter Author's Name: ")
c=int(input("Enter Book Code: "))
t=int(input("Total Books: "))
s=input("Enter Subject: ")
data=(bn,ba,c,t,s)
sql='insert into books values(%s,%s,%s,%s,%s);'
c=con.cursor()
c.execute(sql,data)
con.commit()
print("\n\n\n\nBook Added Successfully.....\n\n\n\n")
wait = input("\n\n\n\nPress enter to continue.....\n\n\n\n\n")
main()
```

def issueb():

```
n=input("Enter Student Name: ")
r=int(input("Enter Reg No.: "))
co=int(input("Enter Book Code: "))
d=input("Enter Date: ")
a="insert into issue values(%s,%s,%s,%s);"
data=(n,r,co,d)
c=con.cursor()
c.execute(a,data)
con.commit()
print("\n\n\n\nBook issued successfully to: ",n)
wait = input("\n\n\n\nPress enter to continue.....\n\n\n\n\n")
bookup(co,-1)
main()
```

def returnb():

```
n=input("Enter Student Name: ")
r=int(input("Enter Reg No.: "))
co=int(input("Enter Book Code: "))
d=input("Enter Date: ")
a="insert into return_ values(%s,%s,%s,%s);"
data=(n,r,co,d)
c=con.cursor()
c.execute(a,data)
con.commit()
print("Book returned by: ",n)
wait = input("\n\n\nPress enter to continue.....\n\n\n\n\n\n\n")
bookup(co,1)
main()
```

def bookup(co,u):

```
a="select total from books where bcode=%s;"
data=(co,)
c=con.cursor()
c.execute(a,data)
myresult=c.fetchone()
t=myresult[0]+u
sql="update books set total=%s where bcode=%s;"
d=(t,co)
c.execute(sql,d)
con.commit()
wait = input("\n\n\nPress enter to continue.....\n\n\n\n\n\n\n")
main()
```

def dbook():

```
ac=int(input("Enter Book Code: "))
a="delete from books where bcode=%s;"
data=(ac,)
c=con.cursor()
c.execute(a,data)
con.commit()
print("Book deleted successfully")
wait = input("\n\n\nPress enter to
continue.....\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n")
main()
```

```
def dispbook():
    a="select * from books;"
    c=con.cursor()
    c.execute(a)
    myresult=c.fetchall()
    for i in myresult:
        print("Book name: ",i[0])
        print("Author: ",i[1])
        print("Book code: ",i[2])
        print("Total:",i[3])
        print("Subject:",i[4])
        print("\n\n')

    wait = input("\n\n\nPress enter to
continue.....\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n')
    main()
```

```
def report_issued_books():
    a="select * from issue;"
    c=con.cursor()
    c.execute(a)
    myresult=c.fetchall()
    for i in myresult:
        print(myresult)

    wait = input("\n\n\nPress enter to
continue.....\n\n\n\n\n\n\n\n\n\n')
    main()
```

```
def report_return_books():
    a="select * from return_;"
    c=con.cursor()
    c.execute(a)
    myresult=c.fetchall()
    for i in myresult:
        print(myresult)

    wait = input("\n\n\nPress enter to
continue.....\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n')
    main()
```

```
def main():
```

```
    print("""
```

LIBRARY MANAGEMENT APPLICATION

1. ADD BOOK
 2. ISSUE OF BOOK
 3. RETURN OF BOOK
 4. DELETE BOOK
 5. DISPLAY BOOKS
 6. REPORT MENU
 7. EXIT PROGRAM
- ```
""")
```

```
choice=input("Enter Task No:.....")
```

```
print("\n\n\n\n\n\n\n\n")
```

```
if(choice=='1'):
```

```
 addbook()
```

```
elif(choice=='2'):
```

```
 issueb()
```

```
elif(choice=='3'):
```

```
 returnb()
```

```
elif(choice=='4'):
```

```
 dbook()
```

```
elif(choice=='5'):
```

```
 dispbook()
```

```
elif(choice=='6'):
```

```
 print(""" R E P O R T M E N U
```

- 
1. ISSUED BOOKS
  2. RETURNED BOOKS
  3. GO BACK TO MAIN MENU
- ```
\n\n\n
```

```
""")
```

```
choice=input("Enter Task No:.....")
```

```
print("\n\n\n\n\n\n\n\n")
```

```
if choice=='1':
```

```
    report_issued_books()
```

```
elif choice=='2':
```

```
    report_return_books()
```

```
elif choice=='3':
```

```
    main()
else:
    print("Please try again.....\n\n\n\n\n\n\n\n\n\n")
    main()
elif(choice=='7'):
    print("\n\n\n\n\n\n\n\n\n\n\n\n\n\nThank you and have a great day
ahead.....\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n")
else:
    print("Please try again.....\n\n\n\n\n\n\n\n\n\n\n\n\n\n")
    main()

main()
```

OUTPUTS AND TABLES

➤ OUTPUTS:

1.) Add a Book:

```

                                L I B R A R Y   M A N A G E M E N T   A P P L I C A T I O N
                                _____

1. ADD BOOK
2. ISSUE OF BOOK
3. RETURN OF BOOK
4. DELETE BOOK
5. DISPLAY BOOKS
6. REPORT MENU
7. EXIT PROGRAM

Enter Task No:.....1

Enter Book Name: The Immortals of Meluha
Enter Author's Name: Amish Tripathi
Enter Book Code: 101
Total Books: 10
Enter Subject: Fiction

Book Added Successfully.....
```

```

                                L I B R A R Y   M A N A G E M E N T   A P P L I C A T I O N
                                _____

1. ADD BOOK
2. ISSUE OF BOOK
3. RETURN OF BOOK
4. DELETE BOOK
5. DISPLAY BOOKS
6. REPORT MENU
7. EXIT PROGRAM

Enter Task No:.....1

Enter Book Name: The Scam
Enter Author's Name: Sucheta Dalal
Enter Book Code: 102
Total Books: 5
Enter Subject: Finance

Book Added Successfully.....
```

2.) Issue a Book:

LIBRARY MANAGEMENT APPLICATION

1. ADD BOOK
2. ISSUE OF BOOK
3. RETURN OF BOOK
4. DELETE BOOK
5. DISPLAY BOOKS
6. REPORT MENU
7. EXIT PROGRAM

Enter Task No:.....2

Enter Student Name: Ajay
Enter Reg No.: 501
Enter Book Code: 107
Enter Date: 10-01-2021

Book issued successfully to: Ajay

Press enter to continue.....

LIBRARY MANAGEMENT APPLICATION

1. ADD BOOK
2. ISSUE OF BOOK
3. RETURN OF BOOK
4. DELETE BOOK
5. DISPLAY BOOKS
6. REPORT MENU
7. EXIT PROGRAM

Enter Task No:.....2

Enter Student Name: Akshay
Enter Reg No.: 502
Enter Book Code: 105
Enter Date: 15-01-2021

Book issued successfully to: Akshay

Press enter to continue.....

3.) Return of Book:

```
LIBRARY MANAGEMENT APPLICATION
-----
1. ADD BOOK
2. ISSUE OF BOOK
3. RETURN OF BOOK
4. DELETE BOOK
5. DISPLAY BOOKS
6. REPORT MENU
7. EXIT PROGRAM

Enter Task No:.....3

Enter Student Name: Akshay
Enter Reg No.: 502
Enter Book Code: 105
Enter Date: 19-01-2021
Book returned by: Akshay

Press enter to continue.....
```

```
LIBRARY MANAGEMENT APPLICATION
-----
1. ADD BOOK
2. ISSUE OF BOOK
3. RETURN OF BOOK
4. DELETE BOOK
5. DISPLAY BOOKS
6. REPORT MENU
7. EXIT PROGRAM

Enter Task No:.....3

Enter Student Name: Ajay
Enter Reg No.: 501
Enter Book Code: 107
Enter Date: 21-01-2021
Book returned by: Ajay

Press enter to continue.....
```

4.) Delete a Book:

LIBRARY MANAGEMENT APPLICATION

1. ADD BOOK
2. ISSUE OF BOOK
3. RETURN OF BOOK
4. DELETE BOOK
5. DISPLAY BOOKS
6. REPORT MENU
7. EXIT PROGRAM

Enter Task No:.....4

Enter Book Code: 109
Book deleted successfully

Press enter to continue.....

5.) Display Books:

LIBRARY MANAGEMENT APPLICATION

1. ADD BOOK
2. ISSUE OF BOOK
3. RETURN OF BOOK
4. DELETE BOOK
5. DISPLAY BOOKS
6. REPORT MENU
7. EXIT PROGRAM

Enter Task No:.....5

Book name: The Immortals of Meluha
Author: Amish Tripathi
Book code: 101
Total: 9
Subject: Fiction

Book name: The Scam
Author: Sucheta Dalal
Book code: 102
Total: 5
Subject: Finance

Book name: Wings of Fire
Author: A.P.J. Abdul Kalam
Book code: 103
Total: 5
Subject: Self Reliance

Book name: One Arranged Murder
Author: Chetan Bhagat
Book code: 104
Total: 5
Subject: Thriller

Book name: Chanakya Neeti
Author: Ashwini Parashar
Book code: 106
Total: 1
Subject: Selfhelp book

Book name: Think & win like Dhoni
Author: Sfurti Sahare
Book code: 107
Total: 6
Subject: Motivation

Book name: Without Fear:Bhagat Singh
Author: Kuldeep Nayyar
Book code: 105
Total: 6
Subject: Biography

Book name: The Invisible Man
Author: H.G.Wells
Book code: 108
Total: 9
Subject: Fiction

Book name: Harry Potter series
Author: J.K.Rowling
Book code: 110
Total: 9
Subject: Drama,Mystery

Press enter to continue.....

6.) Report Menu:

LIBRARY MANAGEMENT APPLICATION

1. ADD BOOK
2. ISSUE OF BOOK
3. RETURN OF BOOK
4. DELETE BOOK
5. DISPLAY BOOKS
6. REPORT MENU
7. EXIT PROGRAM

Enter Task No:.....6

REPORT MENU

1. ISSUED BOOKS
2. RETURNED BOOKS
3. GO BACK TO MAIN MENU

Enter Task No:.....

Enter Task No:.....1

```
('Ajay', '501', 107, '10-01-2021')
('Akshay', '502', 105, '15-01-2021')
('Ranveer', '503', 104, '19-01-2021')
('John', '504', 101, '21-01-2021')
('Abhi', '505', 108, '24-01-2021')
('Pratik', '506', 102, '28-01-2021')
('Neeraj', '507', 106, '31-01-2021')
('Rohit', '508', 104, '02-02-2021')
('Sanjay', '509', 101, '06-02-2021')
('Alia', '510', 110, '09-02-2021')
('Neha', '511', 109, '13-02-2021')
```

Press enter to continue.....

REPORT MENU

1. ISSUED BOOKS
2. RETURNED BOOKS
3. GO BACK TO MAIN MENU

Enter Task No:.....2

```
('Akshay', '502', 105, '19-01-2021')
('Ajay', '501', 107, '21-01-2021')
('John', '504', 101, '28-01-2021')
('Ranveer', '503', 104, '31-01-2021')
('Pratik', '506', 102, '05-02-2021')
```

Press enter to continue.....

REPORT MENU

1. ISSUED BOOKS
2. RETURNED BOOKS
3. GO BACK TO MAIN MENU

Enter Task No:.....3

LIBRARY MANAGEMENT APPLICATION

1. ADD BOOK
2. ISSUE OF BOOK
3. RETURN OF BOOK
4. DELETE BOOK
5. DISPLAY BOOKS
6. REPORT MENU
7. EXIT PROGRAM

7.) Exit Program:

LIBRARY MANAGEMENT APPLICATION

1. ADD BOOK
2. ISSUE OF BOOK
3. RETURN OF BOOK
4. DELETE BOOK
5. DISPLAY BOOKS
6. REPORT MENU
7. EXIT PROGRAM

Enter Task No:.....7

Thank you and have a great day ahead.....

➤ TABLES:

1.) Select * from Books:

```
mysql> select * from books;
```

bname	author	bcode	total	subject
The Immortals of Meluha	Anish Tripathi	101	9	Fiction
The Scam	Sucheta Dalal	102	5	Finanace
Wings of Fire	A.P.J. Abdul Kalam	103	5	Self Reliance
One Arranged Murder	Chetan Bhagat	104	5	Thriller
Chanakya Neeti	Ashwini Parashar	106	1	Selfhelp book
Think & win like Dhoni	Sfurti Sahare	107	6	Motivation
Without Fear:Bhagat Singh	Kuldeep Nayyar	105	6	Biography
The Invisible Man	H.G.Wells	108	9	Fiction
Rich dad poor dad	Robert Kiyosaki	109	1	Selfhelp
Harry Potter series	J.K.Rowling	110	9	Drama,Mystery

```
10 rows in set (0.00 sec)

mysql>
```

2.) Select * from Issue:

```
mysql> select * from issue;
```

name	regno	bcode	issue_date
Ajay	501	107	10-01-2021
Akshay	502	105	15-01-2021
Ranveer	503	104	19-01-2021
John	504	101	21-01-2021
Abhi	505	108	24-01-2021
Pratik	506	102	28-01-2021
Neeraj	507	106	31-01-2021
Rohit	508	104	02-02-2021
Sanjay	509	101	06-02-2021
Alia	510	110	09-02-2021
Neha	511	109	13-02-2021

```
11 rows in set (0.00 sec)
```

3.) Select * from Return_

```
mysql> select * from return_;
```

name	regno	bcode	return_date
Akshay	502	105	19-01-2021
Ajay	501	107	21-01-2021
John	504	101	28-01-2021
Ranveer	503	104	31-01-2021
Pratik	506	102	05-02-2021

```
5 rows in set (0.00 sec)
```

Software Requirement

Name of component	Specification
Operating System	Windows 7 and above, Linux, Ubuntu.
IDE	IDLE Python
Database	MySQL Server
Front End	Python 3.6 or above

Hardware Requirements

Name of component	Specification
Processor	Intel Core i3 4 th Gen and above or AMD equivalent.
RAM	4GB (minimum), 8GB(preferred).
Storage	At least 15GB free space.
Display	At least 800x600 resolution display.

BIBLIOGRAPHY

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