

## Objective: Student Registration Management System

The objective of this code is to create a Student Registration Management System with the following features:

**User Interaction:** The code interacts with the user by presenting a menu that allows them to perform various actions related to student records, such as creating, searching, displaying, modifying, and deleting records.

**Data Management:** It manages student data using a student class, which encapsulates the attributes and behaviors of a student record, such as roll number, name, marks in different subjects, average, and grade.

**File Handling:** The code uses file input/output to store and retrieve student records. It can read and write student records to a binary file named "student.dat."

### Record Operations:

- **Create Student Record:** Users can create a new student record by entering student details and have it written to the data file.
- **Search Student Record:** Users can search for and display a specific student record based on the roll number.
- **Display All Records:** Users can view all existing student records stored in the data file.
- **Modify Student Record:** Users can update the details of a specific student record based on the roll number.
- **Delete Student Record:** Users can delete a specific student record based on the roll number.

**Data Calculation:** The code calculates the average marks and assigns a grade to each student based on their performance.

**User-Friendly Interface:** The code provides clear and structured menus and prompts for user interaction, making it user-friendly.

**Data Validation:** It assumes that all marks should be out of 100, ensuring some level of data validation.

**Exit Mechanism:** The code allows users to exit the program with a "Thank you!" message.

# Welcome to Student Registration Management System

## MENU

1. Create a new student record
2. Search student record
3. Display all students records
4. Delete student record
5. Modify student record
6. Exit

Enter your choice: 1

## Create a new student record

Enter student's roll number: 101

Enter student's name: Rashi

Enter Student's Marks

All marks should be out of 100

Enter marks in English: 45

Enter marks in Math: 59

Enter marks in Science: 66

Enter marks in Second language: 78

Enter marks in Computer science: 89

Student's record has been created

Enter your choice: 2

## Search student record

Enter the roll number: 102

Roll number of student: 102

Name of student: Digyansha

English: 89

Maths: 66

Science: 56

Second Language: 100

Computer Science: 100

Average Marks: 82

Grade of student is: B

Enter your choice: 3

## Displaying All Records

Roll number of student: 101  
Name of student: Ayushi  
English: 100  
Maths: 98  
Science: 98  
Second Language: 89  
Computer Science: 100  
Average Marks: 97  
Grade of student is: A

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Roll number of student: 102  
Name of student: Digyansha  
English: 89  
Maths: 66  
Science: 56  
Second Language: 100  
Computer Science: 100  
Average Marks: 82  
Grade of student is: B

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Roll number of student: 103  
Name of student: Vaidehi  
English: 99  
Maths: 74  
Science: 74  
Second Language: 91  
Computer Science: 93  
Average Marks: 86  
Grade of student is: B

Enter your choice:4

## Delete student record

Enter the roll number: 111  
Record Deleted.

Enter your choice: 5

## Enter new student details

Enter The roll number: 102

Enter student's roll number: 112

Enter student's name: Digyansha

### **Enter Student's Marks**

All marks should be out of 100

Enter marks in English: 91

Enter marks in Math: 66

Enter marks in Science: 56

Enter marks in Second language: 100

Enter marks in Computer science: 90

Record Updated.

Enter your choice: 6

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## Exiting, Thank you!

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Process exited after 1397 seconds with return value 0

Press any key to continue . . .