

### Task 1:

Let student information system of a school keeps the records of every student's name, date of birth, id and their respective cgpa. Create a class called student that will allow you to store all these information regarding a student.

You should define setInfo() function which will set the necessary information of a student object.

Define a function named getInfo() which will return all the stored information belonging a student object.

Include a constructor function to initialize the student object by zero and null values.

**All the member variable to student class should be private.**

### Task 2:

Include one more **const** member function named **getAge()** which will return the age of a student calculated from date of birth. To accomplish this task you have to take additional user input to take current date.

**Your program should check the validity (whether the date is valid or not) of date of birth and current date.**

### Task 3:

Write an overloaded function **getAge()** [Same task as task 2 but ..] by **taking system time** instead of your input for current date. You can take the help from any reference book to check how to take system time in C++.

### Task 4:

Create a **SavingsAccount** class. Use a **static data** member **annualInterestRate** to store the annual interest rate for each of the savers. Each member of the class contains a private data member **savingsBalance** indicating the **amount the saver currently has on deposit**. Provide member function **calculateMonthlyInterest()** that calculates the monthly interest by multiplying the balance by **annualInterestRate** divided by 12; this interest should be added to **savingsBalance**.

Provide a **static member function** **modifyInterestRate** that sets the static **annualInterestRate** to a new value.

Write a driver program to test class **SavingsAccount**. Instantiate two different objects of class **SavingsAccount**: **saver1** and **saver2**, with balances of \$2000.00 and \$3000.00, respectively. Set the **annualInterestRate** to **3 percent**. Then calculate the **monthly interest** and print the new balances for each of the savers. Then set the **annualInterestRate** to **4 percent**, calculate the next month's interest and print the new balances for each of the savers. **Also, count the number of objects created and destroyed for a class using static data members and static member functions**