

AMERICAN INTERNATIONAL UNIVERSITY BANGLADESH  
FACULTY OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF COMPUTER SCIENCE  
C++ PROBLEMS

**Problem 1:**

Create the following two classes:

**class student basic info**

**private:** char name[20]; int age; char gender;

**public:**

void getbasicinfo() // take input of the private variables of this class

void putbasicinfo()// show all the private variables of this in this function

**class student result info**

**private:** float totalmarks; char grade;

**public:**

void getresultinfo() // take input of the private variables of this class

void putresultinfo()// show all the private variables of this in this function

Now, from main function create only object of student\_result\_info class and ask the user to enter all the information of the student and show them.

**Problem 2:**

Create the 3 classes which will have the following members:

**Shape:** **Private:** int height, width

**Public:** Create necessary setter and getter functions to set and get the private values

**Rectangle:** **Public:** write a function to calculate the area of the rectangle

**Triangle:** **Public:** write a function to calculate the area of the rectangle

Remember that you can only create object of Rectangle and Triangle class. By this objects you have to set all the values of each shape and calculate their area. In output section you need to show height, width and area of a shape.

Take all information as user input and for formatted input.

**Problem 3:**

Make the height and width variables of the previous code protected. Now change the code accordingly.