**AMERICAN INTERNATIONAL UNIVERSITY BANGLADESH**

**FACULTY IF 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(that means it will be the child class of student\_basic\_info class) and ask the user to enter all the basic and result information of the student and show them.

**Problem 2:**

Create three functions called display() in a class, one function will take an integer number and display it, second function will take a float number and display it and third one will take an integer and a double and will display the both.

void display(int var)

void display(float var)

void display(int var1, double var2)

**Problem 3:**

Create the 4 classes which will have the following members:

**class person**:

**private**: char name[30]

**protected**: int age

**public**:

1. Create setvalues function to initialize the values
2. void show\_person() : outputs the name of the person

**class Student**: derive the person class

**protected**: float cgpa

**public**:

1. Create setvalues function to initialize the values
2. void show\_Student() : shows cgpa of the student

**class Faculty**: derive the person class

**protected**: int salary\_per\_hour

**public**:

1. Create setvalues function to initialize the values
2. void show\_Faculty() : shows salary per hour of the student

**Class TA:** derives the faculty and student class

**protected**: int hour\_per\_day

**public**:

1. Create setvalues function to initialize the values
2. int salary(): calculate salary per month of TA.
3. void show\_TA() : shows all the information of the TA

Write the main function to test your code.