**Q1**: Write a program in C++ with a class with a name **Student** and data members for **Student\_Rollno**, Three subject marks (**English, Maths and CS**), **Total\_Marks** and **Average**. Assume the appropriate data type for the data member from your side. The **Input\_Data** member function of the Student class takes values for the **Student\_Rollno** and three subjects (**English,Maths and CS**) data member from the user and calculate the **Total\_marks** and **Average** data member value automatically. The **Print\_Data** data member function of the **Student** class display all of the data member values. The main function creates an object of the student class and call the member function using the object created.

**Q2:** What is meant by constructor member function in OOPs. Explsain default copy constructor in C++ with an example.

**Q3:** Write a C++ program with a class with name shape. The shape class has two protected float data member Width and Height and two public member function SetHeight and Setwidth. The SetHeight member function receives an integer parameter and assign it to Height data member and Setwidth member function receives an integer parameter and assign it to Width data member. The program has another class rectangle derived from class shape. The class rectangle has a public member function GetArea with multiple and return Width\*Height as integer value. The main function declare an object of class rectangle and call the SetHeight , Setwidth and GetArea member function the object declared. The main function should also display the value return by GetArea member function using the object created.

**Q4:** what is mean by operator overloading in OOPs, discuss overloading of binary multiplication (\*) operator with the help of a C++ program.