Program 4

4.a Write a java program demonstrating Method overloading.

Program code:

```
class MOverloading
{
        int add(int a, int b)
        {
                int sum = a+b;
                return sum;
         }
        int add(int a, int b, int c)
        {
                int sum = a+b+c;
                return sum;
        }
        float add(float a, float b)
        {
               float sum = a+b;
               return sum;
        }
}
class MOverload
{
        public static void main(String args[])
           {
                MOverloading obj = new MOverloading();
                int s1=obj.add(10, 20);
                int s2=obj.add(10, 20, 30);
                float s3=obj.add(2.2f,2.2f);
                System.out.println("Method Overload Sum1="+s1);
                System.out.println("Method Overload Sum2="+s2);
```

```
                System.out.println("Method Overload Sum3="+s3);
        }
}
```

4.b Write a java program demonstrating Constructor overloading.

```
public class Constructor
        {
                int id;
                String name;
                Constructor()
                {
                    System.out.println("This is Default constructor");
                    System.out.println("Student Id : "+id + "\nStudent Name : "+name);
                }
               Constructor(int i, String n)
                {
                        System.out.println("This is Parameterized Constructor:");
                        id = i;
                        name = n;
                        System.out.println("Student Id : "+id + "\nStudent Name : "+name);
                }
         public static void main(String[] args)
        {
                Constructor s = new Constructor();
                Constructor student = new Constructor(10, "David");
        }
}
```