

POLYMORPHISM

1. Write a java program for adding two or more numbers

Class name: adder

Method name: addition()

Program:

```
class adder{
    void addition(int a , int b){
        System.out.println(a+b);
    }
    void addition(double a , double b){
        System.out.println(a+b);
    }
    void addition(int a , int b,int c){
        System.out.println(a+b+c);
    }
    void addition(int a , int b,int c ,int d){
        System.out.println(a+b+c+d);
    }
    void addition(double a, double b, double c, double d){
        System.out.println(a+b+c+d);
    }
}

class add{
    public static void main(String args[]){
        adder obj= new adder();
        obj.addition(10,20);
        obj.addition(1.1,4.2);
        obj.addition(23,56,4);
        obj.addition(78,9,47,6);
    }
}
```

```
obj.addition(1.2,2.3,3.4,4.5);  
}}
```

Output:

```
30  
5.3000000000000001  
83  
140  
11.4
```

2. Write a java program for finding the area of the Shapes such as Circle, Square, Rectangle.

Class name:shape

Method name:area

PROGRAM:

```
class shape{  
    void area(double a){  
        area=Math.PI*a*a;  
        System.out.println(area);  
    }  
    void area(int a){  
        area=a*a;  
        System.out.println(area);  
    }  
    void area(int a, int b){  
        area=0.5*a*b;  
        System.out.println(area);  
    }  
}  
  
class areaof{
```

```
public static void main(String args[]){  
    shape obj= new shape();  
    obj.area(2.1);  
    obj.area(8);  
    obj.area(7,8);  
}  
}
```

OUTPUT:

13.854423602330987

64

28.0