Q3)

**Create an abstract class Calculate which has three double members -say x, y and result. Include a method calc. Derive three classes from Calculate which performs any three arithmetic operations on the two variables x and y and assign the result to the variable result. Make appropriate declarations and definitions.**

## CODE:

```
import java.util.Scanner;

abstract class Calculate
{
    double x;
    double y;
    double result;

    Calculate(int x, int y) {
        this.x = x;
        this.y = y;
    }

    abstract void calc();
}

class Add extends Calculate
{
    Add(int x, int y)
    {
        super(x,y);
    }
    void calc()
    {
        result = x + y;
        System.out.println("The result of addition is : "+result);
    }

}

class Sub extends Calculate
{
    Sub(int x, int y)
    {
        super(x,y);
```

```
    }
    void calc()
    {
        result = x - y;
        System.out.println("The result of Subtraction is : "+result);
    }

}

class Mul extends Calculate
{
    Mul(int x, int y)
    {
        super(x,y);
    }
    void calc()
    {
        result = x * y;
        System.out.println("The result of Multiplication is : "+result);
    }

}

class CalcMain
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter value of X : ");
        int x = sc.nextInt();
        System.out.println("Enter value of Y : ");
        int y = sc.nextInt();
        Add a=new Add(x, y);
        a.calc();

        Sub s=new Sub(x, y);
        s.calc();

        Mul m=new Mul(x, y);
        m.calc();
    }
}
```

## OUTPUT:

```
C:\Users\Anagha\Desktop\OOJ\Lab6>javac CalcMain.java

C:\Users\Anagha\Desktop\OOJ\Lab6>javac CalcMain.java

C:\Users\Anagha\Desktop\OOJ\Lab6>java CalcMain
Enter value of X :
10
Enter value of Y :
5
The result of addition is : 15.0
The result of Subtraction is : 5.0
The result of Multiplication is : 50.0
```