```
import.java.util.*
class demo
{
    public static void main (String args [])
    {
        system.out.println ("Hello World\n");
    }
}
```

Output:
Hello World

Quadratic

```
import java.util.Scanner;
class Quadratic
{
  int a, b, c;
  double r1, r2, d;
  void getd()
  {
    Scanner s = new Scanner (System.in);
    System.out.println ("Enter the coefficients
      of a, b, c");
    a = s.nextInt();
    b = s.nextInt();
  }
void compute()
{
  while (a == 0)
  {
    System.out.println ("Not a quadratic
    equation");
    System.out.println ("Enter a non zero
    value for a");
    Scanner s = new Scanner (System.in);
    a = s.nextInt();
  }
```

```
d = b*b - 4*a*c;
if(d==0)
{
    r1 = (-b)/(2*a);
    System.out.println("Roots are real and
    equal");
    System.out.println("Roots are = Root2 = " +r1);
}
else if(d>0)
{
    r1 = ((-b) + (Math.sqrt(d)))/(double)(2*a);
    r2 = ((-b) - (Math.sqrt(d)))/(double)(2*a);
    System.out.println("Roots are real and
    distinct");
    System.out.println("Root1 = " +r1+ "Root2 = " +r
    2);
}
else if(d<0)
{
    System.out.println("Roots are imaginary");
    r1 = (-b)/(2*a);
    r2 = Math.sqrt(-d)/(2*a);
    System.out.println("Root1 = " +r1+ " + i" +r2);
    System.out.println("Root2 = " +r1+ " - i" +r2);
}
}
}
```

```
class QuadraticMain
{
    public static void main(String args[])
    {
        Quadratic q = new Quadratic();
        q.getd();
        q.compute();
    }
}
```

Output:

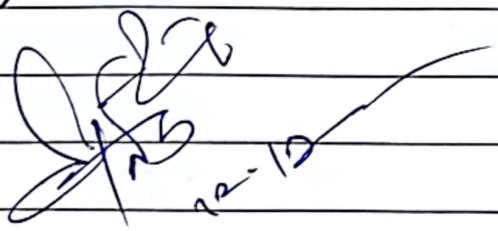
```
Rushil    1BM22CS225
Enter coefficients of a,b,c
4 5 6
Roots are imaginary
Root1 = 0.0+i1.0532687216470449
Root2 = 0.0-i1.0532687216470449

Rushil    1BM22CS225
Enter coefficients of a,b,c
1 -2 1
Roots are real and equal
Root1 = Root2 = 1.0

Rushil    1BM22CS225
Enter coefficients of a,b,c
1 -3 2
Roots are real and distinct
```

To Find area of rectangle

```
import java.util.*;
class rectangleArea {
    public static void main (String args[]){
        int length, breadth;
        length = Integer.parseInt(args[0]);
        breadth = Integer.parseInt(args[1]);
        int area = length*breadth;
        System.out.println("length of rectangle = "+length);
        System.out.println("breadth of rectangle = "+breadth);
        System.out.println("area of rectangle = "+area);
    }
}
```

Output

```
10 8
length of rectangle = 10
breadth of rectangle = 8
Area of rectangle = 80
```



program

```
class Factorial {
    public static void main (String args[])
    {
        int Fac = 1;
        System.out.println ("Enter a number");
        int n = sc.nextInt();
        for (int i=1; i<=n; i++) {
            Fac = Fac*i;
        }
        System.out.println ("The Factorial : "+Fac);
    }
}
```