LAB 1import java.util.Scanner;

```
class quadratic {
public static void main(String[] args) {

        double a,b,c,disc;
        double r1, r2;
        Scanner inp= new Scanner(System.in);
        System.out.println("Enter values for a,b,c:\n");
        a=inp.nextDouble();
        b=inp.nextDouble();
        c=inp.nextDouble();
        disc=((b*b)-(4*a*c));
if(disc>0){
         System.out.println("roots are real");
         r1 = (-b+ Math.sqrt(disc))/(2*a);
         r2 = (-b- Math.sqrt(disc))/(2*a);
         System.out.println("r1=" +r1+  "r2="+r2);
        }

        else if(disc == 0) {
         System.out.println("roots are real and equal");
         r1=r2 =-b/(2*a);
        }

        else {
        System.out.println("no real roots exist");

     }
   }
```

```
c:\workspace>javac quadratic.java

c:\workspace>java quadratic
Enter values for a,b,c:

1 -4 -10
roots are real
r1=5.741657386773941r2=-1.7416573867739413
c:\workspace>
```

}

```
c:\workspace>javac quadratic.java

c:\workspace>java quadratic
Enter values for a,b,c:

1 -3 -10
roots are real
r1=5.0r2=-2.0
c:\workspace>javac quadratic.java

c:\workspace>java quadratic
Enter values for a,b,c:

1 2 3
no real roots exist
```