**LAB PROGRAM 1**

import java.util.Scanner;

public class quadratic{

public static void main(String[] args){

int a,b,c;

double d,r1,r2;

Scanner in=new Scanner(System.in);

System.out.println("Enter the values of a,b,c");

a=in.nextInt();

b=in.nextInt();

c=in.nextInt();

d=(b\*b)-(4\*a\*c);

if(d>0)

{

System.out.println("roots are real and unequal");

r1=(-b+Math.sqrt(d))/(2\*a);

r2=(-b-Math.sqrt(d))/(2\*a);

System.out.println("The roots are " + r1 + " and " + r2);

}

else if(d == 0)

{

System.out.println("roots are real and equal");

r1 = r2 = -b / (2 \* a);

System.out.println("The root is " + r1);

}

else

{

System.out.println("roots are imaginary and no real solution exists");

}

}

}

**OUTPUT**

