1BM19CS167
SWAROOP.S.JADHAV

WEEK 3

```
import java.util.*;
class Quadratic
{
    public static void findRoots(int a, int b, int c)
    {
        if (a==0)
        {   System.out.println("Invalid Input");
            return;
        }

        int d = (b*b)-(4*a*c);
        double sqrt_val = Math.sqrt(d);

        if(d>0)
        {   System.out.println("Roots are real and different");
            System.out.println((double)(-b + sqrt_val)/(2*a)+
            " is the first root and " + (double)(-b - sqrt_val)/(2*a)+
            " is the second root");
        }
    else if(d==0){
    {   System.out.println("Roots are real and same");
        System.out.println("The Root is" + -(double)b/(2*a));
        }
    else
    {   System.out.println("Roots are complex");
        }
}
```

CLASSMATE

Date

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```
public static void main (String args[])
{
    Scanner sc = new Scanner (System.in);
    System.out.println("Enter the value of a : ");
    int a = sc.nextInt();
    System.out.println("Enter the value of b : ");
    int b = sc.nextInt();
    System.out.println("Enter the value of c : ");
    int c = sc.nextInt();
    findRoots(a,b,c);
  }
}
```