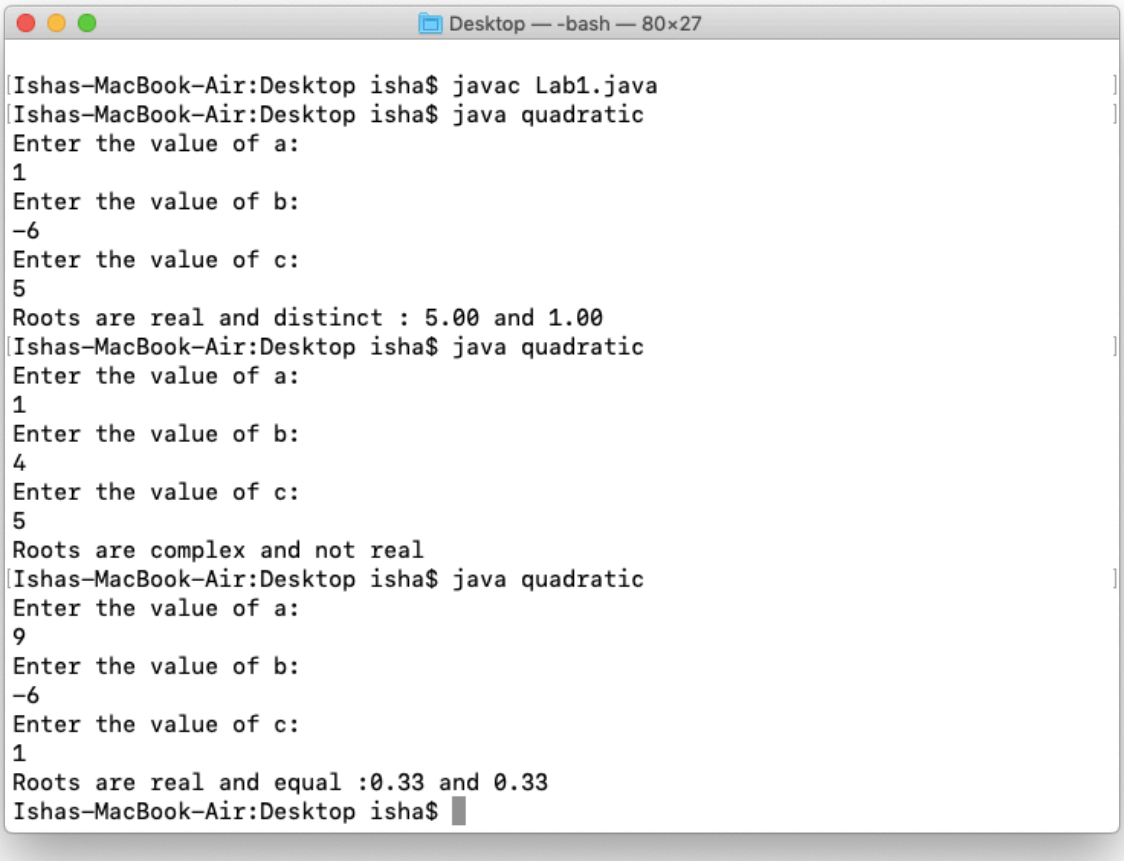
```
import java.util.Scanner;
class quadratic
{
   public static void main(String[] args)
   {
         Scanner ss= new Scanner(system.in);

        System.out.println("Enter the value of a:");
        double a=ss.nextDouble();
        System.out.println("Enter the value of b:");
        double b=ss.nextDouble();
        System.out.println("Enter the value of c:");
        double c=ss.nextDouble();

        double d=Math.sqrt((b*b)-(4*a*c));
        double r1,r2;

    if(d>0)
    {
      r1=(-b+d)/(2*a);
      r2=(-b-d)/(2*a);
      System.out.printf("Roots are real and distinct : %.2f and %.2f”,r1,r2);
      System.out.println();
    }
    else if(d==0)
    {
      r1=r2=(-b/(2*a));
      System.out.printf("Roots are real and equal :%.2f and %.2f”,r1,r2);
      System.out.println();
    }
    else
    {
      System.out.printf("Roots are complex and not real”);
      System.out.println():
    }
}
}
```


Desktop — -bash — 80×27
Ishas-MacBook-Air:Desktop isha$ javac Lab1.java
Ishas-MacBook-Air:Desktop isha$ java quadratic
Enter the value of a:
1
Enter the value of b:
-6
Enter the value of c:
5
Roots are real and distinct : 5.00 and 1.00
Ishas-MacBook-Air:Desktop isha$ java quadratic
Enter the value of a:
1
Enter the value of b:
4
Enter the value of c:
5
Roots are complex and not real
Ishas-MacBook-Air:Desktop isha$ java quadratic
Enter the value of a:
9
Enter the value of b:
-6
Enter the value of c:
1
Roots are real and equal :0.33 and 0.33
Ishas-MacBook-Air:Desktop isha$