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Ques Write a Program that prints all real solutions to the quadratic equation $ax^2+bx+c=0$. Read in a, b, c and use the quadratic formula. If the discriminant b^2-4ac is negative, display message stating that there are no real solutions.

CODE:

```
import java.io.*;
import java.util.*;
public class Quadeq
{
public static void roots (double a, double b, double c)
{
double d, root1, root2;
if(a==0)
System.out.println("a shouldn't be zero!");
else
 {
d = b*b - 4*a*c;
if(d>0)
 {
root1 = (-b+Math.sqrt(d))/(2*a);
root2 = (-b-Math.sqrt(d))/(2*a);
System.out.println("Roots are unequal");
System.out.println("Root1:");
System.out.printf("%.4f", root1);
System.out.println("Root2:");
System.out.printf("%.4f", root2);
}
if(d==0)
{
```

```
System.out.println("Roots are real and equal");
}
else if(d<0)
{
System.out.println("Roots are complex and imaginary
.there are no real solutions");
}
}
}
public static void main(String[] args)
{
Scanner scanner=new Scanner(System.in);
System.out.printf("Input the value of a");
double a=scanner.nextDouble();
System.out.printf("Input the value of b");
double b=scanner.nextDouble();
System.out.printf("Input the value of c");
double c=scanner.nextDouble();
roots(a,b,c);
}
}
```