```
Roots.java - Notepad
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import java.util.*;
class Roots {
public static void main(String args[]){
double r1= 0, r2= 0;
Scanner sc = new Scanner(System.in);
System.out.println("Enter the value of a :");
double a = sc.nextDouble();
System.out.println("Enter the value of b :");
double b = sc.nextDouble();
System.out.println("Enter the value of c:");
double c = sc.nextDouble();
double determinant = (b*b)-(4*a*c);
double sqrt = Math.sqrt(determinant);
if(determinant>0){
r1=(-b + sqrt)/(2*a);
r2 = (-b - sqrt)/(2*a);
System.out.println("Roots are real");
System.out.println("Roots are :: "+ r1 +" and "+r2);
else if(determinant == 0){
System.out.println("Roots are real and equal");
System.out.println("Root is :: "+(-b)/(2*a));
else if (determinant<0){
System.out.println("the equation has no real roots");
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nter the value of a :
nter the value of b :
inter the value of c :
he equation has no real roots
:\Users\Pooja K\Desktop>java Roots
nter the value of a :
inter the value of b :
inter the value of c :
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loots are real
Roots are :: 6.0 and -6.0
:\Users\Pooja K\Desktop>java Roots
inter the value of a :
inter the value of b :
inter the value of c :
Roots are real and equal
Root is :: -1.0
```

:\Users\Pooja K\Desktop>

2 oct Date: 1 1 POOJA.K 18M1965111 Algorithm Input values of a,b,c. balculate determinant and square root of determinant. il (determinant >0) other print roots are preal and r1=(b+ sqrt(D)) and 22 = (-b - sqrt(0)) if (determinant=0), then print roots are are are 200t = -b if (determinanant <0) then print there are no real roots. pooja &

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Pooja-K
                                   18M19 (5111
1/ Find roots of quadratic equation
 import. java. relil, *;
 class Roots &
 public static rold main (String args[]) }
 double 2/20, 22=0;
 Scanner sc = new Scanner (System. in);
System. out. println ("Enter the value of a ?");
double a = gc. neut Double();
 System. out. printly (" Siter value of b: ");
 double b= sc, nentDoublel);
 hystern. out. printly ("Enter value of c: ");
 double c= sc. neut Double();
 double determinant = (6x6) - (4xax);
 double zgat = Math. sqvt ( (leterninant);
 if (determinant >0) {
  21= (-b+ sent) ((2 *9);
  A2 = (-b-sext)/(2*a);
 Bys.out (" Roots one real");
   Systiout (" Roots are : " + 21 + "and" + 92);
 else if (determinant = =0) q
 System.out. printin ("Root is 1: "+ (-b) / (2 xa));}
  Else of (determinant to) {
Bys. out (" the equation has me real noch");
```