

Quadratic Equation

```
import java.util.*;
class QuadraticEquation
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);
        System.out.println("Quadratic Equation of  

                           form  $ax^2 + bx + c$ );
        System.out.println("enter the values of a, b & c  

                           respectively");

        int a = sc.nextInt();
        int b = sc.nextInt();
        int c = sc.nextInt();
        while(a != 0)
        {
            float D = (b*b) - (4*a*c);
            System.out.println("the
            if (D == 0)
            {
                float x = (b*b)/(2*a);
                System.out.println("the roots are real, equal  

                                   and is equal to "+x);
                break;
            }
        }
```

```

}
else if (D > 0)
{
float xa = (-b + (b*b - 4*a*c)^(1/2)) / (2*a);
float xb = (-b - (b*b - 4*a*c)^(1/2)) / (2*a);
System.out.println("the roots are real, unequal
and are equal to "+xa+" & "
+xb);

break ;
}
else if (D < 0)
{
System.out.println("the roots are imaginary");
break ;
}
}
}
}
}

```