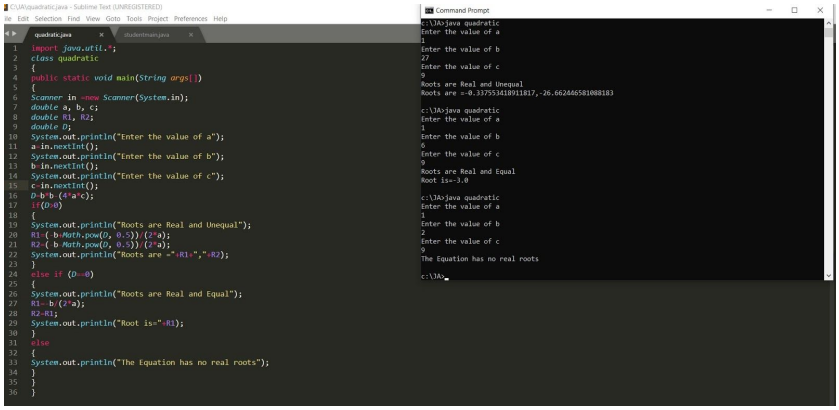
Program 1

```
import java.util.*;
class quadratic
{
public static void main(String args[])
{
Scanner in =new Scanner(System.in);
double a, b, c;
double R1, R2;
double D;
System.out.println("Enter the value of a");
a=in.nextInt();
System.out.println("Enter the value of b");
b=in.nextInt();
System.out.println("Enter the value of c");
c=in.nextInt();
D=b*b-(4*a*c);
if(D>0)
{
System.out.println("Roots are Real and Unequal");
R1=(-b+Math.pow(D, 0.5))/(2*a);
R2=(-b-Math.pow(D, 0.5))/(2*a);
System.out.println("Roots are ="+R1+","+R2);
}
else if (D==0)
{
System.out.println("Roots are Real and Equal");
R1=-b/(2*a);
R2=R1;
System.out.println("Root is="+R1);
}
else
{
System.out.println("The Equation has no real roots");
}
}
}
```


C:\JA\quadratic.java - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
quadratic.java
studentmain.java
import java.util.*;
class quadratic
{
public static void main(String args[])
{
Scanner in =new Scanner(System.in);
double a, b, c;
double R1, R2;
double D;
System.out.println("Enter the value of a");
a=in.nextInt();
System.out.println("Enter the value of b");
b=in.nextInt();
System.out.println("Enter the value of c");
c=in.nextInt();
D=b*b-(4*a*c);
if(D>0)
{
System.out.println("Roots are Real and Unequal");
R1=(-b+Math.pow(D, 0.5))/(2*a);
R2=(-b-Math.pow(D, 0.5))/(2*a);
System.out.println("Roots are :-"+R1+","+R2);
}
else if (D==0)
{
System.out.println("Roots are Real and Equal");
R1=-b/(2*a);
R2=R1;
System.out.println("Root is="+R1);
}
else
{
System.out.println("The Equation has no real roots");
}
}
}
Command Prompt
c:\JA>java quadratic
Enter the value of a
1
Enter the value of b
27
Enter the value of c
9
Roots are Real and Unequal
Roots are :-0.3375534189111817,-26.662466581088183
c:\JA>java quadratic
Enter the value of a
1
Enter the value of b
6
Enter the value of c
9
Roots are Real and Equal
Root is=-3.0
c:\JA>java quadratic
Enter the value of a
1
Enter the value of b
2
Enter the value of c
9
The Equation has no real roots
c:\JA>