Lab programme 1

```
import java.util.Scanner;
class Quadratic{
    int a,b,c;
    Scanner sc=new Scanner(System.in);
    Quadratic()
       inputData();
    }
    public void inputData()
        System.out.println("enter the value of a,b and c respectively");
         a=sc.nextInt();
         b=sc.nextInt();
         c=sc.nextInt();
         calc();
    }
    public void calc()
        double root1=0, root2=0;
        int D=(b*b)-(4*a*c);
        if (D<0)
        {
            System.out.println("there is no real solution");
            return;
        }
        else if(D>0)
            root1=(-b+ Math.pow(D, 0.5))/2*a;
            root2=(-b-Math.pow(D,0.5))/2*a;
            System.out.println("roots are real and distinct and values for them
        }
        else
        {
            root1=(-b/2*a);
            System.out.println("roots are equal and its value is"+root1);
```

Lab programme 1

```
}

}

class Main
{
   public static void main(String[] args) {
      Quadratic qc=new Quadratic();
   }
}
```

OUTPUT

```
*C:\Program Files\Java\jdk-21\bin\java.exe* *-javaagent:C:\Program Files\Jet8rains\IntelliJ IDEA Community Edition 2023.2.3\lib\idea_rt.jar=52748:C:\Program enter the value of a,b and c respectively 1 2 2 there is no real solution
```

C:\Program Files\Java\jdk-21\bin\java.exe *-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2023.2.3\lib\idea_rt.jar=52776:C:\Progra enter the value of a,b and c respectively
1 5 6
roots are real and distinct and values for them are : -2.0and -3.0

Lab programme 1 2

	LAB PROGRAMME - 2/1
	Develop a java programe that prints all real solution
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Č.	discriminate b= 4ac is negative display there are no
	real solutions (Itan) altang the motors
	and the second s
	import java util. Scan ner;
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	Quadratic ()
	[^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^
	& input Data ();
	public void inputData ()
	System-out, printer ("Entex the value of a, b and c respectively");
	a = sc, nextInt;
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Tillia.	c = (scinex+ Int; 1) sign sing state silving
9	b calc (d) chance on to any method is
2	
(A)	
•	Public void calc ()
	& double root1, root2;
	u double D = (b * b)-(4 * a * c) 150 107 107 100
	most (D<0) and then traited has the end advant
. Jary	{ System. Out. printin ("No real solutions exist");}
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