WEEK3---LAB EXERCISE 1

LAB PROGRAM

```
import java.util.Scanner;

import java.lang.Math;

public class Main

{

        public static void main(String[] args) {

                Scanner in=new Scanner(System.in);

                int a,b,c;

                double r1,r2,d;

                char ch;

                System.out.println("Solution of Quadratic equation- ax^2+bx+c ");

                do

                {

                System.out.println("\nenter a:");

                a=in.nextInt();

                System.out.println("enter b:");

                b=in.nextInt();

                System.out.println("enter c:");

                c=in.nextInt();

                d=((b*b)-(4*a*c));

                if(d>0)

                {

                   r1=((-b+Math.sqrt(d))/(2*a));

                   r2=((-b-Math.sqrt(d))/(2*a));
```

```
        System.out.println("roots are-\n"+"r1= "+r1+"\n"+"r2= "+r2);
    }
    else if(d==0)
    {
        r1=(-b/(2*a));
        System.out.println("roots are equal-\n"+"r1=r2= "+r1);
    }
    else
    {
        System.out.println("there are no real roots");
    }
    System.out.println("\n"+"do you want to find another set of roots? y/n?");
    ch=in.next().charAt(0);
    }
    while(ch=='y');
    }
}
```