09/10/2020

LAB program:
To find the roots of quadratic equation. using java.

```java
import java.util.Scanner;
class Rootsofquadraticequation {
public static void main(String[] args){
int a, b, c;
double dis, x1, x2;
Scanner myobject = new Scanner(System.in);
System.out.println("Enter the values of a,b and c).
a = myobj.nextInt();
b = myobj.nextInt();
c = myobj.nextInt();
dis = b*b - 4*a*c;
if(a==0 && b==0)
System.out.println("No roots exist");
else if(dis>=0)
{
System.out.println("The Roots of quadratic
                    equation are");
x1 = (-b+Math.sqrt(b*b-4*a*c))/(2*a);
x2 = (-b-Math.sqrt(b*b-4*a*c))/(2*a);
System.out.println("x1="+x1 +"\n x2="+x2);
}
else if(dis==0)
{ system.out.println("The Roots of quadratic
                     equation are");
```

```
        x_2 = -b | (2*a) ;

        x_2 = -b / (2*a) ;
System. out. println (" x_1 = x_2 = " + x_1);
}.


    if (dis < 0)
    System. out. println (" No real roots exist");
    }

    }
```