WEEK-3

Lab program :- (Quadratic eq^n)

```
=> import java.util.Scanner;
public class roots
{
   public static void main (String args[])
   {
      double second Root = 0, first Root = 0;
      Scanner sc = new Scanner (System.in);
      System.out.println ("Enter the value of a :- ");
      double a = sc.nextDouble();

      System.out.println ("Enter the value of b :- ");
      double b = sc.nextDouble();

      System.out.println ("Enter the value of c :- ");
      double c = sc.nextDouble();

   double determinant = (b*b) - (4*a*c);
   double sqrt = Math.sqrt (determinant);

   if (determinant > 0)
   {
      first root = (-b + sqrt) / 2*a.
      second root = (-b - sqrt)/(2*a.;
      System.out.println ("Roots are -- " + first root + "
```

```
        and " + secondRoot );
    }

    else if (determinant == 0)
    { System.out.println ("Root is:: " + (-b + Sqrt) / 2*a);
    }
    else if (determinant < 0)
    { System.out.println ("There are no real solutions");
    }
    }
}
```