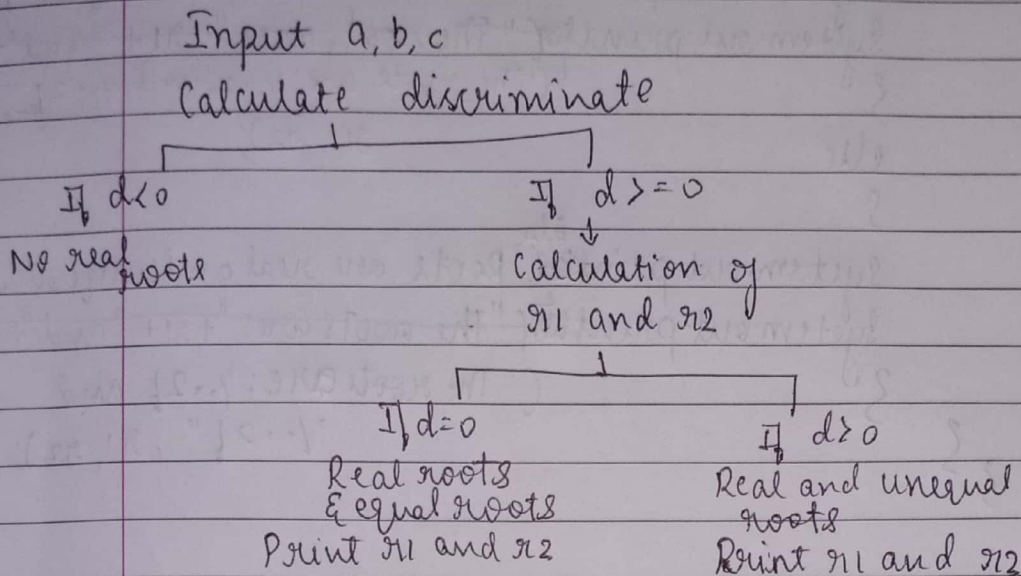


Week 3 (Lab program)

Page No. _____

Date _____

Algorithm:



Program:

```
import java.util.Scanner;
class oop1;
{
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        double a, b, c, r1, r2, d;
        System.out.println("Enter the values of a, b, c");
        a = sc.nextDouble();
        b = sc.nextDouble();
        c = sc.nextDouble();
        d = (b*b) - (4*a*c);
        if (d < 0)
            System.out.println("No real roots for the given quadratic equation");
        else if (d >= 0)
        {
            r1 = (-b + (Math.sqrt(d))) / (2*a);
            r2 = (-b - (Math.sqrt(d))) / (2*a);
        }
    }
}
```

```
if (d == 0)
```

```
{  
    System.out.println("Roots are real and equal")  
    System.out.println("The roots are: " + r1 + " and " + r2)  
    System.out.println("The roots are: %.2f and %.2f", r1, r2);  
}
```

```
else
```

```
{
```

```
    System.out.println("Roots are real and unequal")  
    System.out.println("The roots are: " + r1 + " and " + r2)
```

```
    System.out.println("The roots are: %.2f and %.2f", r1, r2);  
}
```

```
}
```