# Experiment 2

## Programs on Basic programming constructs like branching and looping

### WAP to print the roots of quadratic equation.

// a. WAP to print the roots of quadratic equation  
import java.util.Scanner;  
class Roots{  
 public static void main(String args[]) {  
 Scanner sc = new Scanner(System.in);  
 System.out.println("Enter the coefficients of the quadratic equation");  
 int a, b, c;  
 a = sc.nextInt();  
 b = sc.nextInt();  
 c = sc.nextInt();  
 int D = (b\*b - 4\*a\*c);  
 double rootD = Math.sqrt(D);  
 boolean is0 = (D == 0);  
 System.out.println(( is0 ? ("The root is " + -b / (2\*a)) :   
 ("The roots are: " + ((-b + rootD) / (2\*a)) + "and "+  
 ((-b - rootD) / (2\*a)) )));  
 }  
}

### WAP to check if entered number is a prime number.

## Study of different operators in java

### WAP to compare two numbers

### WAP to print truth table for java logical operators

### WAP to read the number & shift left & right by 3 bits