Practical No 2

Write a Java program to illustrate the concept of array

A. write a java program to accept and display single dimensional array

Program:

```
public class JavaApplication7 {
   public static void main(String[] args) {
      int array[];
      array=new int[5];
      System.out.println("Array elements are=");
      for(int i=0;i<array.length;i++)
      {
         array[i]=i+1;
         System.out.println(array[i]);
      } //end for
   }//end main
}//end class
```

Output:

```
run:
Array elements are=
1
2
3
4
5
```

B. write a java program to accept and display two dimensional array

Program:

```
import java.io.DataInputStream;
import java.io.IOException;
public class TwoDiArray {
   public static void main(String[] args) throws IOException {
      int ar[][]=new int[4][3];
      DataInputStream dis=new DataInputStream(System.in);
      System.out.println("Enter 12 element of 4x3 array");
      for(int i=0;i<=3;i++){
         for(int j=0;j<=2;j++){
```

```
            ar[i][j]=Integer.parseInt(dis.readLine());
          }//end j
        }//end i
       System.out.println("array element are=");
        for(int i=0;i<=3;i++){
          for(int j=0;j<=2;j++){
            System.out.print(ar[i][j]+" ");
          }//end j
          System.out.println();
        }//end i
      }//end main
    }//end class
```

Output:

```
run:
Enter 12 element of 4x3 array
1
2
3
4
5
6
7
8
9
10
11
12
array element are=
1 2 3
4 5 6
7 8 9
10 11 12
```

F.write a java program to accept value of a,b,c which are co-efficient of quadratic equation .

Program:

```
        import java.io.DataInputStream;
        import java.io.IOException;
public class Quadratic {
 public static void main(String[] args) throws IOException {
```

```
        int a,b,c;
        DataInputStream dis = new DataInputStream(System.in);
        System.out.println("Enter the values of a,b,and c=");
        a=Integer.parseInt(dis.readLine());
        b=Integer.parseInt(dis.readLine());
        c=Integer.parseInt(dis.readLine());
        double temp1=(b*b)-(4*a*c);
        if(temp1<0)
           temp1=temp1*(-1);
        double temp=Math.sqrt(temp1);
        double root1=((-b+temp)/(2*a));
        double root2=((-b-temp)/(2*a));
           System.out.println("roots of quadratic equation are "+root1+" and"+root2);
    }
}
```

Output:

```
run:
Enter the values of a,b,and c=
1
-2
-8
roots of quadratic equation are 4.0 and-2.0
```