Worksheet 1

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Branch:MCA **Section/Group**-2/A

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Subject Name: Advance internet programming lab **Subject Code:** 20CAP-617

Q. : Write a program to initialize an integer array with values and check if a given number is present in the array or not.

Aim: Introduction to arrays.

Task to be done: Implementation of arrays.

Algorithm/flowchart-

Search
Step 1: Set i to 1

Step 2: if i > n then go to step 7

Step 3: if Arr[i] = x then go to step 6

Step 4: Set i to i + 1

Step 5: Go to Step 2

Step 6: Print Element x Found at index i and go to step 8

Step 7: Print element not found

Step 8: Exit

Data Set:
Array id:[1,2,3]
Array name=[”vivek”,”Shivani”,”Rahul”]
Array score=[99,90,80]
Search id:2

Code for experiment/Practical:

```
public class Practical1 {
   public static void main(String[] args) {
      Scanner scan=new Scanner(System.in);
      boolean flag=false;
      System.out.println("enter the number of students");
      int size=scan.nextInt(),i; //taking number of students
      int id[]=new int[size];     //initializing array id of int type
      String name[]=new String[size];    //initializing array name of String type
      double score[]=new double[size];    //initializing array score of double type
      System.out.println("enter the id of the student");
      for(i=0;i<size;i++)
      {
         System.out.print("Student "+(i+1)+":");
         id[i]=scan.nextInt();          //inserting id to array
      }
      System.out.println("enter the name of the student");
      for(i=0;i<size;i++)
      {
         System.out.print("Student "+(i+1)+":");
         name[i]=scan.next();           //inserting name  to array
      }
      System.out.println("enter the score of the student");
      for(i=0;i<size;i++)
      {
```

```
        System.out.print("Student "+(i+1)+":");
        score[i]=scan.nextDouble();         //inserting id to array
      }
      System.out.println("enter the id to search");
      int search=scan.nextInt();              //search value

      for(i=0;i<size;i++)
      {
        if(search==id[i])               //if id found
        {
          System.out.println("====================");
          System.out.println("index:"+i);
          System.out.println("student id:"+search);
          System.out.println("student name:"+name[i]);
          System.out.println("student score:"+score[i]);
          flag=true;
        }
      }
      if(!flag)                       //if id not found
      {
        System.out.println("-1");
        System.out.println("student not found");
      }
    }
}
```

Result/Output/WritingSummary:

```
run:
enter the number of students
3
enter the id of the student
Student 1:1
Student 2:2
Student 3:3
enter the name of the student
Student 1:vivek
Student 2:shivani
Student 3:rahul
enter the score of the student
Student 1:90
Student 2:99
Student 3:88
enter the id to search
5
-1
student not found
BUILD SUCCESSFUL (total time: 24 seconds)
```

Learning Outcomes:

i. Arrays of different data type.
ii. Searching in array.