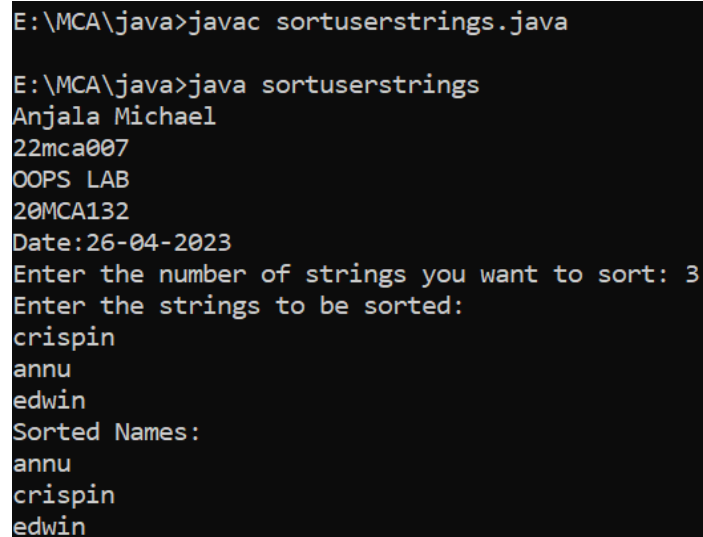# LAB CYCLE - 2

1. Program to Sort strings.

CODE

```java
import java.util.Arrays;
import java.util.Scanner;
public class sortuserstrings {
  public static void main(String[] args) {
    Scanner input = new Scanner(System.in);
    System.out.println("Anjala Michael\n22mca007\nOOPS LAB\n20MCA132\nDate:26-04-2023");
    System.out.print("Enter the number of strings you want to sort: ");
    int n = input.nextInt();
    String[] names = new String[n];

    System.out.println("Enter the strings to be sorted:");
    for (int i = 0; i < n; i++) {
      names[i] = input.next();
    }
        Arrays.sort(names);
    System.out.println("Sorted Names: ");
    for (String name : names) {
      System.out.println(name);
    }
  }
}
```

OUTPUT

```
E:\MCA\java>javac sortuserstrings.java

E:\MCA\java>java sortuserstrings
Anjala Michael
22mca007
OOPS LAB
20MCA132
Date:26-04-2023
Enter the number of strings you want to sort: 3
Enter the strings to be sorted:
crispin
annu
edwin
Sorted Names:
annu
crispin
edwin
```

2. Search an element in an array.

CODE

```java
import java.util.Scanner;
public class searchelement {
  public static void main(String[] args) {
      Scanner input = new Scanner(System.in);
      System.out.println("Anjala Michael\n22mca007\nOOPS LAB\n20MCA132\nDate:26-04-2023");
      System.out.print("Enter the size of the array: ");
      int n = input.nextInt();
      int[] arr = new int[n];
      System.out.println("Enter the elements of the array:");
      for (int i = 0; i < n; i++) {
        arr[i] = input.nextInt();
      }
      System.out.print("Enter the element to search: ");
      int key = input.nextInt();
      boolean found = false;
      for (int i = 0; i < n; i++) {
        if (arr[i] == key) {
          found = true;
          System.out.println("Element found at position " + (i+1));
          break;
        }
      }
      if (!found) {
        System.out.println("Element not found in the array.");
      }
  }
}
```

OUTPUT

```
E:\MCA\java>javac searchelement.java

E:\MCA\java>java searchelement
Anjala Michael
22mca007
OOPS LAB
20MCA132
Date:26-04-2023
Enter the size of the array: 4
Enter the elements of the array:
34 23 45 99
Enter the element to search: 45
Element found at position 3

E:\MCA\java>
```

3. Perform string manipulations

CODE

```java
import java.util.Scanner;
public class String_man{
    public static void main(String[] args) {
    System.out.println("Anjala Michael\n22mca007\nOOPS LAB\n20MCA132\nDate:26-04-2023");
        System.out.println("Enter The String");
        Scanner sc = new Scanner(System.in);
        String str1 = sc.nextLine();
        System.out.println("Length of String = "+str1.length());
        System.out.println("Character at First position  = "+str1.charAt(1));
        System.out.println("String Contains 'Col' sequence :"+str1.contains("Col"));
        System.out.println("String ends with e : "+str1.endsWith("e"));
        System.out.println("Replace 'col' with 'kol' : "+str1.replaceAll("Col","kol"));
        System.out.println("LOWERCASE : "+str1.toLowerCase());
        System.out.println("UPPERCASE : "+str1.toUpperCase());
}
}
```

OUTPUT

```
E:\MCA\java>javac String_man.java

E:\MCA\java>java String_man
Anjala Michael
22mca007
OOPS LAB
20MCA132
Date:26-04-2023
Enter The String
hello word
Length of String = 10
Character at First position  = e
String Contains 'Col' sequence :false
String ends with e : false
Replace'col' with 'kol' : hello word
LOWERCASE : hello word
UPPERCASE : HELLO WORD

E:\MCA\java>
```

4. Program to create a class for Employee having attributes eNo, eName eSalary. Read n employ information and Search for an employee given eNo, using the concept of Array of Objects.

CODE

```java
import java.util.Scanner;
public class employee {
    int eNo;
    String eName;
    double eSalary;
    public void getdetails(){
        System.out.println("\nEnter the Employee details");
        Scanner sc = new Scanner(System.in);
        System.out.println("Employee number : ");
        eNo=sc.nextInt();
        System.out.println("Name : ");
        sc.nextLine();
        eName=sc.nextLine();
        System.out.println("Salary : ");
        eSalary=sc.nextDouble();
    }
    void display(){
        System.out.println("Empolyee No :"+eNo);
        System.out.println("Name :"+eName);
        System.out.println("Salary Amount"+eSalary+"\n");
    }
    public static void main(String[] args) {
    System.out.println("Anjala Michael\n22mca007\nOOPS LAB\n20MCA132\nDate:26-04-
2023");
        System.out.println("\nEnter the No. of Employee's");
        Scanner sc1 = new Scanner(System.in);
        int num = sc1.nextInt();
        employee arr[]=new employee[num];
        for(int i =0;i<num;i++){
            arr[i]=new employee();
            arr[i].getdetails();

        }
        System.out.println("\nInformations of all the employee's");
        for(int i=0;i<num;i++){
            arr[i].display();
```

```
 }
boolean state = false;
System.out.println("\nEnter the Employee Number to get details of a employee");
int num2= sc1.nextInt();
for(int i=0;i<num;i++){
   if(arr[i].eNo==num2){
   System.out.println("\nEmployee details");
    arr[i].display();
   }
  }
 }
}
```

OUTPUT

```
E:\MCA\java>java employee
Anjala Michael
22mca007
OOPS LAB
20MCA132
Date:26-04-2023

Enter the No. of Employee's
2

Enter the Employee details
Employee number :
111
Name :
anu
Salary :
30000

Enter the Employee details
Employee number :
112
Name :
binu
Salary :
35000

Informations of all the employee's
Empolyee No :111
Name :anu
Salary Amount30000.0

Empolyee No :112
Name :binu
Salary Amount35000.0


Enter the Employee Number to get details of a employee
111
```

```
Enter the Employee Number to get details of a employee
111

Employee details
Empolyee No :111
Name :anu
Salary Amount30000.0
```