

Cycle 2

1. Program to Sort strings

```
import java.util.Scanner;
import java.util.Arrays;
public class sort
{
    public static void main(String[] args)
    {
        int i,j;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the number of words");
        int num=sc.nextInt();
        String word[]=new String[num];
        sc.nextLine();
        System.out.println("\nEnter the Words\n");
        for( i=0;i<num;i++)
        {
            word[i]=sc.nextLine();
        }
        for( i=0;i<num-1;i++)
        {
            for( j=i+1;j<num;j++)
            {
                if(word[i].compareTo(word[j])>0)
                {
                    String temp = word[i];
                    word[i]=word[j];
                    word[j]=temp;
                }
            }
        }
        System.out.println("Megha Praveen");
        System.out.println("SJC22MCA-039");
        System.out.println("12-04-23");
        System.out.println("Object Oriented Programming Lab");
        System.out.println("20MCA132");
    }
}
```

```

        System.out.println("Sorted Strings using compareTo function
="+Arrays.toString(word));
        System.out.println(word);
    }
}

```

```

(base) sjcet@Z238-UL:~/Meghapraveen/S2/Java/Cycle2$ javac sort.java
(base) sjcet@Z238-UL:~/Meghapraveen/S2/Java/Cycle2$ java sort
Enter the number of words
2

Enter the Words

apple
mango
Megha Praveen
SJC22MCA-039
12-04-23
Object Oriented Programming Lab
20MCA132
Sorted Strings using compareTo function =[apple, mango]
[Ljava.lang.String;@677327b6
(base) sjcet@Z238-UL:~/Meghapraveen/S2/Java/Cycle2$ 

```

2. Search an element in an array.

```
import java.util.Scanner;
import java.util.Arrays;
public class sort
{
    public static void main(String[] args)
    {
        int i,j;
        System.out.println("Megha Praveen");
        System.out.println("SJC22MCA-039");
        System.out.println("12-04-23");
        System.out.println("Object Oriented Programming Lab");
        System.out.println("20MCA132");
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the number of words");
        int num=sc.nextInt();
        String word[]=new String[num];
        sc.nextLine();
        System.out.println("\nEnter the Words\n");
        for( i=0;i<num;i++)
        {
            word[i]=sc.nextLine();
        }
        for( i=0;i<num-1;i++)
        {
            for( j=i+1;j<num;j++)
            {
                if(word[i].compareTo(word[j])>0)
                {
                    String temp = word[i];
                    word[i]=word[j];
                    word[j]=temp;
                }
            }
        }
        System.out.println("Sorted Strings using compareTo function
="+Arrays.toString(word));
        System.out.println(word);
    }
}
```

```
}
```

```
12 javac Search.java
(base) sjcet@Z238-UL:~/Meghapraveen/S2/Java/Cycle2$ javac Search.java
(base) sjcet@Z238-UL:~/Meghapraveen/S2/Java/Cycle2$ java Search
Megha Praveen
SJC22MCA-039
12-04-23
Object Oriented Programming Lab
20MCA132
Enter the number of elemets in array
3

Enter a Word

apple
orange
mango
Enter the element to Search
mango
Element found at position = 2
(base) sjcet@Z238-UL:~/Meghapraveen/S2/Java/Cycle2$
```

3. Perform string manipulations

```
import java.util.Scanner;
public class string
{
    public static void main(String[] args)
    {
        System.out.println("Enter The String");
        Scanner sc = new Scanner(System.in);
        String str1 = sc.nextLine();
        System.out.println("Megha Praveen");
        System.out.println("SJC22MCA-039");
        System.out.println("12-04-23");
        System.out.println("Object Oriented Programming Lab");
        System.out.println("20MCA132");
        System.out.println("Length of String = "+str1.length());
        System.out.println("LOWERCASE : "+str1.toLowerCase());
        System.out.println("UPPERCASE : "+str1.toUpperCase());
    }
}
```

```
(base) sjcet@Z238-UL:~/Meghapraveen/S2/Java/Cycle2$ javac string.java
(base) sjcet@Z238-UL:~/Meghapraveen/S2/Java/Cycle2$ java string
Enter The String
malayalam
Megha Praveen
SJC22MCA-039
12-04-23
Object Oriented Programming Lab
20MCA132
Length of String = 9
LOWERCASE : malayalam
UPPERCASE : MALAYALAM
(base) sjcet@Z238-UL:~/Meghapraveen/S2/Java/Cycle2$
```

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.

```
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("Employee No :"+eNo);
        System.out.println("Name :"+eName);
        System.out.println("Salary Amount"+eSalary+"\n");
    }
    public static void main(String[] args)
    {
        System.out.println("Megha Praveen");
        System.out.println("SJC22MCA-039");
        System.out.println("12-04-23");
        System.out.println("Object Oriented Programming Lab");
        System.out.println("20MCA132");
        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();
    }
}
}
}

```

```
(base) sjcet@Z238-UL:~/Meghapraveen/S2/Java/Cycle2$ javac employee.java
(base) sjcet@Z238-UL:~/Meghapraveen/S2/Java/Cycle2$ java employee
```

Megha Praveen

SJC22MCA-039

12-04-23

Object Oriented Programming Lab

20MCA132

Enter the No. of Employee's

2

Enter the Employee details

Employee number :

101

Name :

martin

Salary :

100000

Enter the Employee details

Employee number :

102

Name :

lakshmi

Salary :

150000

Informations of all the employee's

Empolyee No :101

Name :martin

Salary Amount100000.0

Empolyee No :102

Name :lakshmi

Salary Amount150000.0

Enter the Employee Number to get details of a employee

101

Employee details

Empolyee No :101

Name :martin

Salary Amount100000.0