

Course Outcome 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("Name: Athul Ajay");
        System.out.println("Reg No: SJC22MCA-017");
        System.out.println("Date: 28/03/2023");
        System.out.println("Course code: 20MCA132");
        System.out.println("Enter the number of
        words"); int num=sc.nextInt(); String word[]=new
        String[num]; sc.nextLine(); for( i=0;i<num;i++){
        System.out.println("\nEnter a Word\n");
        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);
    }}
```

```

sjcet@Z238-UL:~/Athul/Java/C2$ javac sort.java
sjcet@Z238-UL:~/Athul/Java/C2$ java sort
Name: Athul Ajay
Reg No: SJC22MCA-017
Date: 28/03/2023
Course code: 20MCA132
Enter the number of words
4

Enter a Word

Python

Enter a Word

PHP

Enter a Word

Java

Enter a Word

Ruby
Sorted Strings using CompareTo function =[Java, PHP, Python, Ruby]

```

2. Search an element in an array.

```
import java.util.Scanner;
```

```

public class Search { public static void
    main(String[] args) { int i,j,x=0;
        boolean state = false;
        Scanner sc = new Scanner(System.in);
        System.out.println("Name: Athul Ajay");
        System.out.println("Reg No: SJC22MCA-017"); System.out.println("Date:
        28/03/2023");
        System.out.println("Course code: 20MCA132");
        System.out.println("Enter the number of elemets in array");
        int num=sc.nextInt(); String word[]=new String[num];
        sc.nextLine(); for( i=0;i<num;i++){

```

```
System.out.println("\nEnter a Word\n"); word[i]=sc.nextLine();
}
System.out.println("Enter the element to Search");
String search = sc.nextLine(); for( i=0;i<num;i++){
    if(word[i].equals(search)){ x = i;
        state = true;
    } } if(state)
    {
System.out.println("Element found at position = "+x);
    }
    else{
System.out.println("Element found not found");

    }
}
}
```

```

sjcet@Z238-UL:~/Athul/Java/C2$ javac Search.java
sjcet@Z238-UL:~/Athul/Java/C2$ java Search
Name: Athul Ajay
Reg No: SJC22MCA-017
Date: 28/03/2023
Course code: 20MCA132
Enter the number of elemets in array
4

Enter a Word

HTML

Enter a Word

CSS

Enter a Word

Javascript

Enter a Word

MySQL
Enter the element to Search
CSS
Element found at position = 1
sjcet@Z238-UL:~/Athul/Java/C2$

```

3. Perform string manipulations

```

import java.util.Scanner;
public class String_man{
    public static void main(String[] args) {
        System.out.println("Name: Athul Ajay");
        System.out.println("Reg No: SJC22MCA-017");
        System.out.println("Date: 28/03/2023");
        System.out.println("Course code: 20MCA132");
        System.out.println();
        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());
}
}

```



```

sjcet@Z238-UL:~/Athul/Java/C2$ javac String_man.java
sjcet@Z238-UL:~/Athul/Java/C2$ java String_man
Name: Athul Ajay
Reg No: SJC22MCA-017
Date: 28/03/2023
Course code: 20MCA132

Enter The String
December is the coldest month
Length of String = 29
Character at First position = e
String Contains 'Col' sequence :false
String ends with e : false
Replace'col' with 'kol' : December is the koldest month
LOWERCASE : december is the coldest month
UPPERCASE : DECEMBER IS THE COLDEST MONTH

```

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 Employee(int
```

```
eNo, String
```

```
eName, double
```

```
eSalary) {
```

```
    this.eNo = eNo; this.eName
```

```
    = eName; this.eSalary =
```

```
    eSalary;
```

```
}
```

```
public static void main(String[] args) {
```

```
    System.out.println("Name: Athul Ajay");
```

```
    System.out.println("Reg No: SJC22MCA-017");
```

```
    System.out.println("Date: 28/03/2023");
```

```
    System.out.println("Course code: 20MCA132");
```

```
    System.out.println();
```

```
    Scanner scanner = new Scanner(System.in);
```

```
    System.out.print("Enter the number of employees: "); int
```

```
    n = scanner.nextInt();
```

```
    Employee[] employees = new Employee[n]; for
```

```
    (int i = 0; i < n; i++) {
```

```
        System.out.println("Enter details for employee " + (i+1) +
```

```
        ":"); System.out.print("eNo: "); int eNo = scanner.nextInt();
```

```
        System.out.print("eName: "); String eName =
```

```
        scanner.next(); System.out.print("eSalary: "); double
```

```
        eSalary = scanner.nextDouble();
```

```
        employees[i] = new Employee(eNo, eName, eSalary);
```

```
    }
```

```
    System.out.print("Enter the employee number to search: ");
```

```
    int searchNo = scanner.nextInt(); boolean found = false; for
```

```
    (Employee employee : employees) { if
```

```
        (employee.eNo == searchNo) {
```

```
            System.out.println("Employee
```

```

        found: eNo=" + employee.eNo + ",
        eName="
+ employee.eName + ", eSalary=" + employee.eSalary); found
        = true;
        break;
    }}
    if (!found) {
        System.out.println("Employee not found.");
    }

    scanner.close();
}
}

```

```

sjcet@Z238-UL:~/Athul/Java/C2$ javac Employee.java
sjcet@Z238-UL:~/Athul/Java/C2$ java Employee
Name: Athul Ajay
Reg No: SJC22MCA-017
Date: 28/03/2023
Course code: 20MCA132

Enter the number of employees: 3
Enter details for employee 1:
eNo: 001
eName: Ammu
eSalary: 32000
Enter details for employee 2:
eNo: 002
eName: Appu
eSalary: 20000
Enter details for employee 3:
eNo: 003
eName: Achu
eSalary: 17000
Enter the employee number to search: 002
Employee found: eNo=2, eName=Appu, eSalary=20000.0
sjcet@Z238-UL:~/Athul/Java/C2$

```