

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$
```