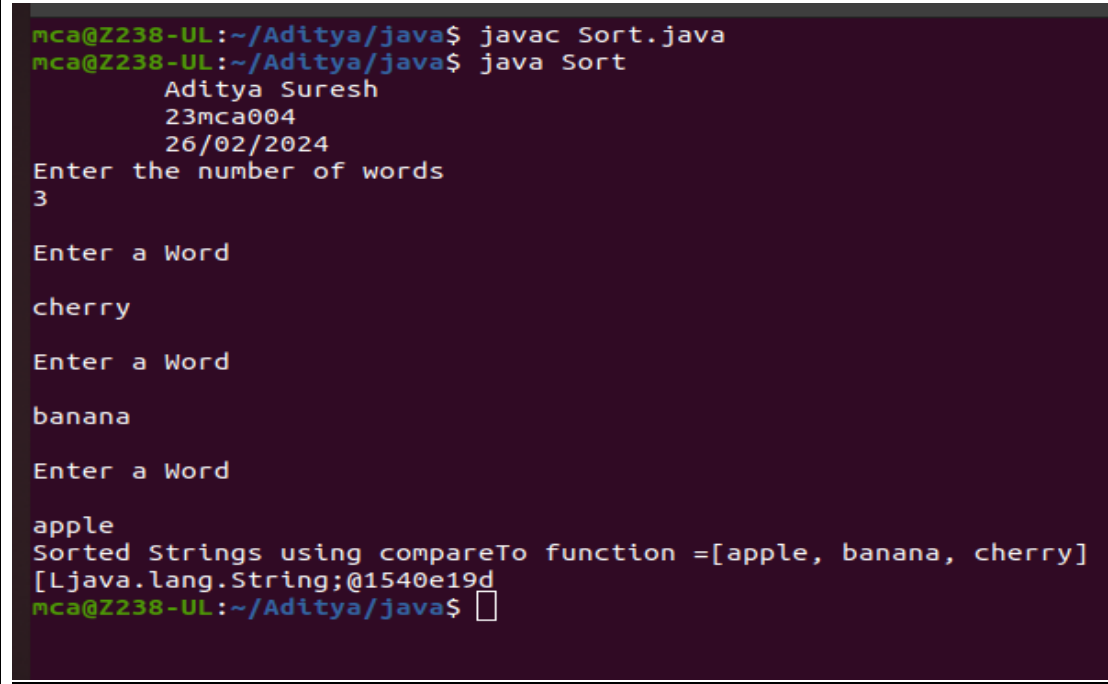# CYCLE 2

1. Program to Sort strings

Code

```java
import java.util.Scanner;
import java.util.Arrays;
public class Sort {
    public static void main(String[] args) {
    System.out.println("\tAditya Suresh\n\t23mca004\n\t26/02/2024");
    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();
    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);


}}
```

OUTPUT

```
mca@Z238-UL:~/Aditya/java$ javac Sort.java
mca@Z238-UL:~/Aditya/java$ java Sort
        Aditya Suresh
        23mca004
        26/02/2024
Enter the number of words
3

Enter a Word

cherry

Enter a Word

banana

Enter a Word

apple
Sorted Strings using compareTo function =[apple, banana, cherry]
[Ljava.lang.String;@1540e19d
mca@Z238-UL:~/Aditya/java$ 
```

2. Search an element in an array.

Code

```java
import java.util.Scanner;
public class Search {
    public static void main(String[] args) {
    System.out.println("\tAditya Suresh\n\t23mca004\n\t26/02/2024");
        int i,j,x=0;
        boolean state = false;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the number of elemets in array:");
        int num=sc.nextInt();
        String word[]=new String[num];
        sc.nextLine();
        System.out.println("\nEnter a Word\n");
        for( i=0;i<num;i++){

        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+1;
                state = true;
            }
        }
```
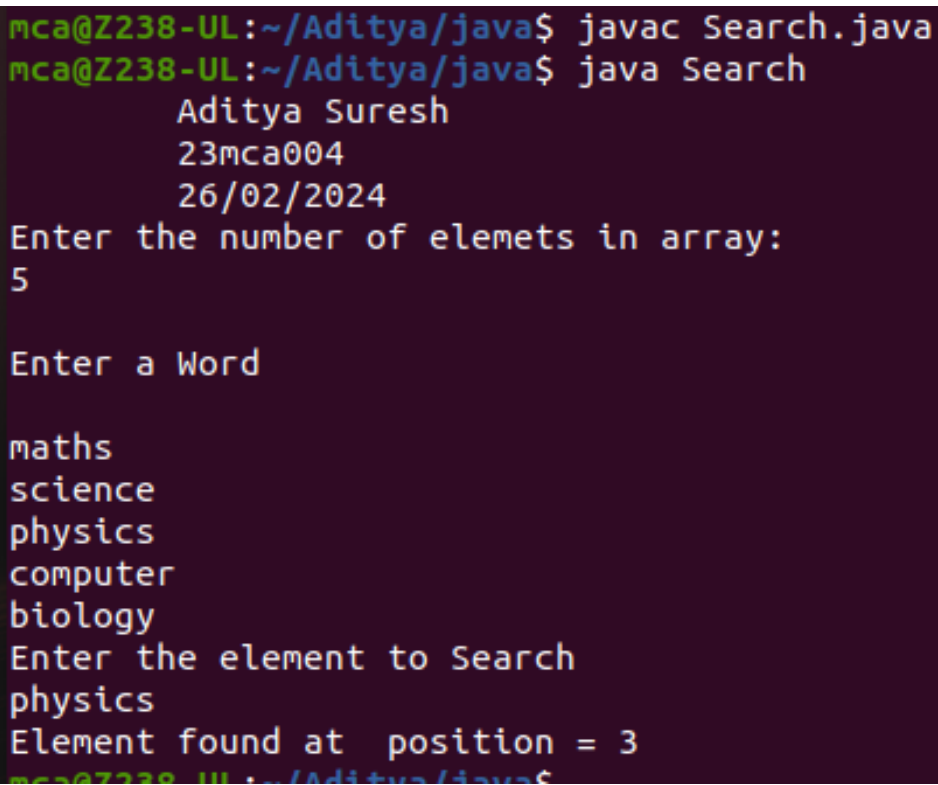
```
      if(state){

   System.out.println("Element found at  position = "+x);

      }

      else{

   System.out.println("Element found not found");



      }

  }


}
```

OUTPUT

```
mca@Z238-UL:~/Aditya/java$ javac Search.java
mca@Z238-UL:~/Aditya/java$ java Search
        Aditya Suresh
        23mca004
        26/02/2024
Enter the number of elemets in array:
5

Enter a Word

maths
science
physics
computer
biology
Enter the element to Search
physics
Element found at  position = 3
mca@Z238-UL:~/Aditya/java$
```

3. Perform string manipulations

Code

```java
//String Manipulation
import java.util.Scanner;
public class String_man{
    public static void main(String[] args) {
    System.out.println("\tAditya Suresh\n\t23mca004\n\t26/02/2024");
        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());
}
}
```
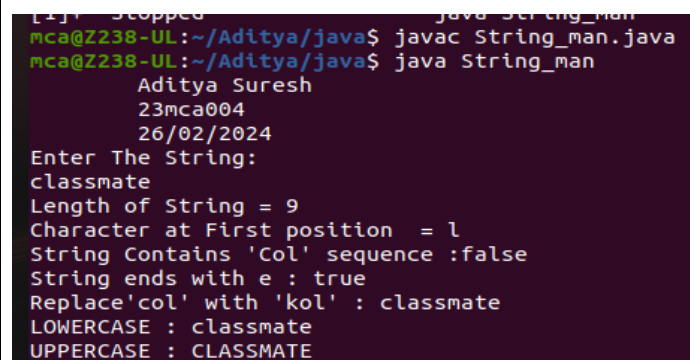
OUTPUT

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

```
import java.util.Scanner;
// 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("Empolyee No :"+eNo);
        System.out.println("Name :"+eName);
```

```java
        System.out.println("Salary Amount"+eSalary+"\n");

    }

   public static void main(String[] args) {

System.out.println("\tAdityaSuresh\n\t23mca004\n\t26/02/2024");

    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

```
mca@Z238-UL:~/Aditya/java$ java employee
        Aditya Suresh
        23mca004
        26/02/2024

Enter the No. of Employee's
2

Enter the Employee details
Employee number :
12
Name :
aditya
Salary :
250000

Enter the Employee details
Employee number :
31
Name :
suresh
Salary :
320000

Informations of all the employee's
Empolyee No :12
Name :aditya
Salary Amount250000.0

Empolyee No :31
Name :suresh
Salary Amount320000.0


Enter the Employee Number to get details of a employee
31

Employee details
Empolyee No :31
Name :suresh
Salary Amount320000.0
```