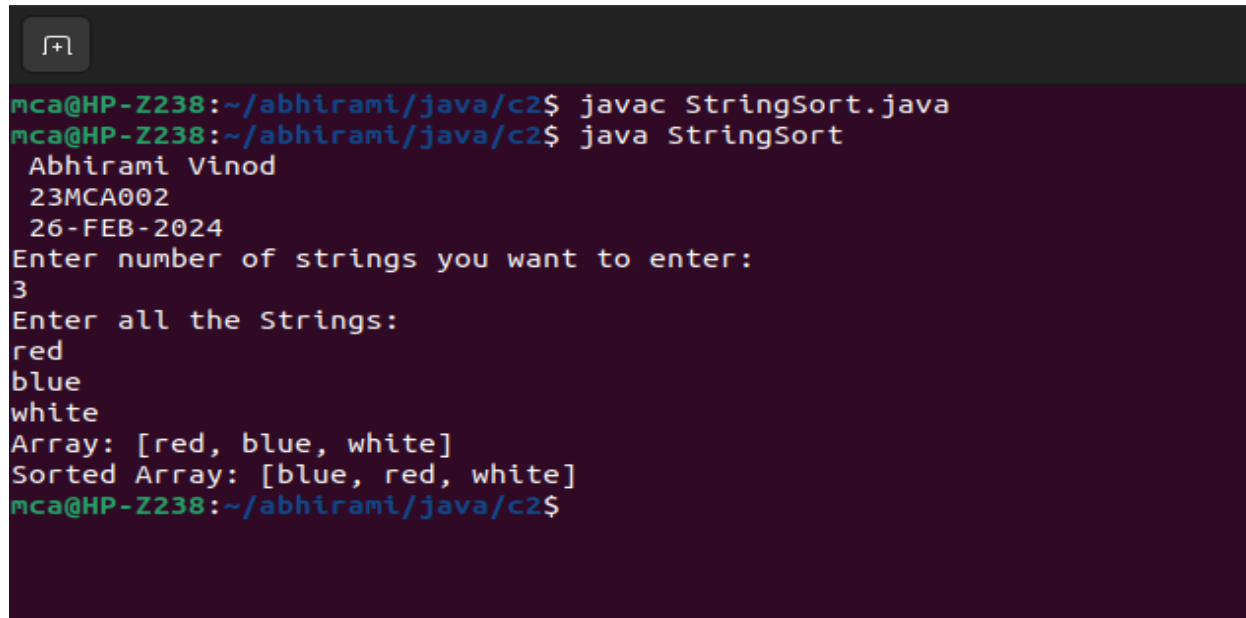


6. Program to Sort strings

Program:

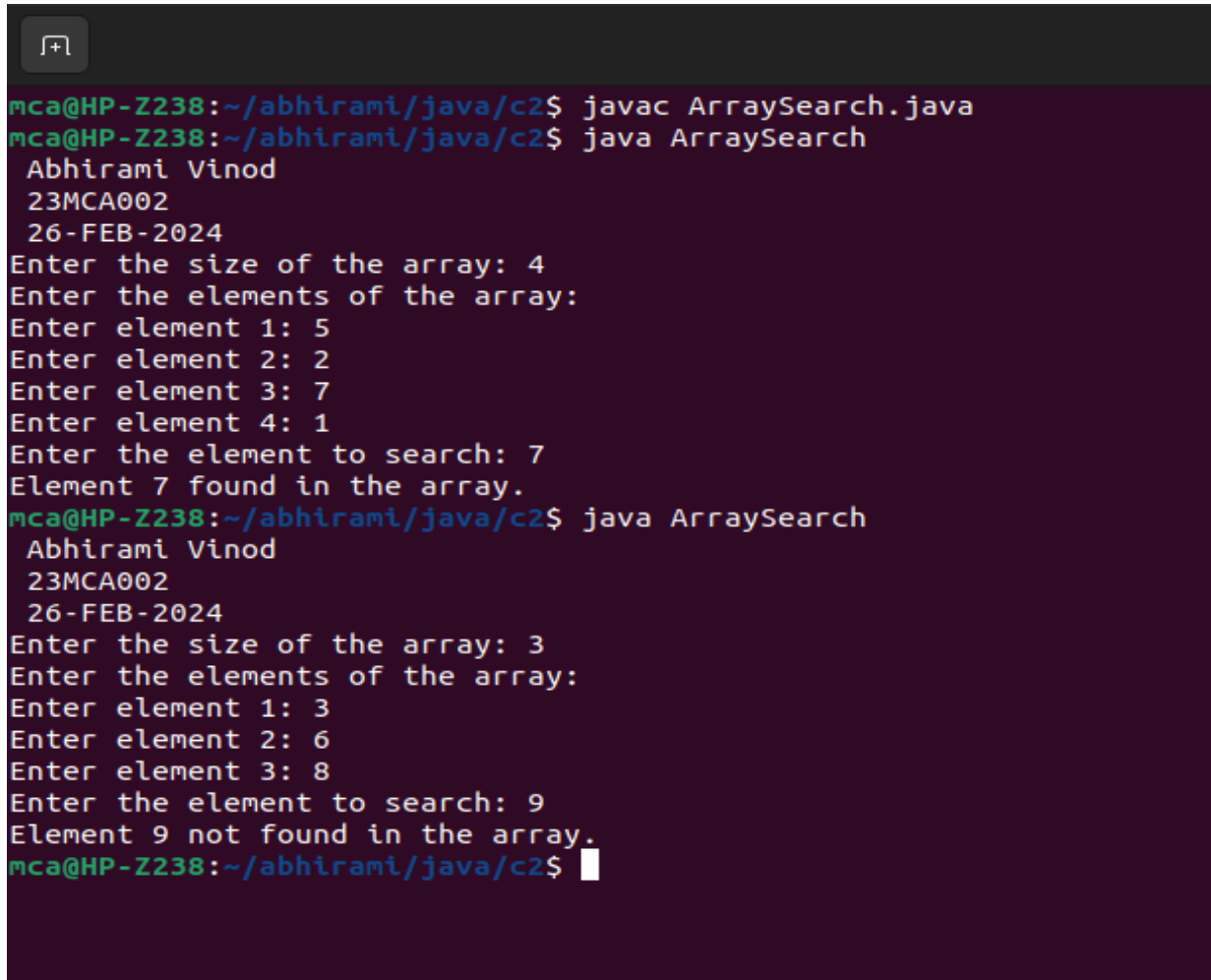
```
import java.util.Scanner;
import java.util.Arrays;
public class StringSort
{
    public static void main(String[] args)
    {
        int n;
        String temp;
        Scanner s = new Scanner(System.in);
        System.out.print(" Abhirami Vinod\n 23MCA002\n 26-FEB-2024\n");
        System.out.print("Enter number of strings you want to enter:\n");
        n = s.nextInt();
        String strings[] = new String[n];
        Scanner s1 = new Scanner(System.in);
        System.out.println("Enter all the Strings:");
        for(int i = 0; i < n; i++)
        {
            strings[i] = s1.nextLine();
        }
        System.out.println("Array: " + Arrays.toString(strings));
        Arrays.sort(strings);
        System.out.println("Sorted Array: " + Arrays.toString(strings));
    }
}
```

Output:A terminal window with a dark purple background and light green text. The prompt is 'mca@HP-Z238:~/abhirami/java/c2\$'. The user enters 'javac StringSort.java' and then 'java StringSort'. The program outputs the name 'Abhirami Vinod', ID '23MCA002', and date '26-FEB-2024'. It then asks 'Enter number of strings you want to enter:' and the user enters '3'. It then asks 'Enter all the Strings:' and the user enters 'red', 'blue', and 'white' on separate lines. The program then displays 'Array: [red, blue, white]' and 'Sorted Array: [blue, red, white]'. The prompt returns to 'mca@HP-Z238:~/abhirami/java/c2\$'.

```
mca@HP-Z238:~/abhirami/java/c2$ javac StringSort.java
mca@HP-Z238:~/abhirami/java/c2$ java StringSort
Abhirami Vinod
23MCA002
26-FEB-2024
Enter number of strings you want to enter:
3
Enter all the Strings:
red
blue
white
Array: [red, blue, white]
Sorted Array: [blue, red, white]
mca@HP-Z238:~/abhirami/java/c2$
```

7. Search an element in an array.**Program:**

```
import java.util.Scanner;
public class ArraySearch {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print(" Abhirami Vinod\n 23MCA002\n 26-FEB-2024\n");
        System.out.print("Enter the size of the array: ");
        int size = scanner.nextInt();
        int[] array = new int[size];
        System.out.println("Enter the elements of the array:");
        for (int i = 0; i < size; i++)
        {
            System.out.print("Enter element " + (i + 1) + ": ");
            array[i] = scanner.nextInt();
        }
        System.out.print("Enter the element to search: ");
        int searchElement = scanner.nextInt();
        boolean found = false;
        for (int i = 0; i < size; i++) {
            if (array[i] == searchElement)
            {
                found = true;
                break;
            }
        }
        if (found)
        {
            System.out.println("Element " + searchElement + " found in the array.");
        } else {
            System.out.println("Element " + searchElement + " not found in the array.");
        }
        scanner.close();
    }
}
```

Output:

```
mca@HP-Z238:~/abhiraami/java/c2$ javac ArraySearch.java
mca@HP-Z238:~/abhiraami/java/c2$ java ArraySearch
Abhiraami Vinod
23MCA002
26-FEB-2024
Enter the size of the array: 4
Enter the elements of the array:
Enter element 1: 5
Enter element 2: 2
Enter element 3: 7
Enter element 4: 1
Enter the element to search: 7
Element 7 found in the array.
mca@HP-Z238:~/abhiraami/java/c2$ java ArraySearch
Abhiraami Vinod
23MCA002
26-FEB-2024
Enter the size of the array: 3
Enter the elements of the array:
Enter element 1: 3
Enter element 2: 6
Enter element 3: 8
Enter the element to search: 9
Element 9 not found in the array.
mca@HP-Z238:~/abhiraami/java/c2$
```

8. Perform string manipulations

Program:

```
import java.util.Scanner;

public class StringManip{

    public static void main(String[] args) {

        System.out.println("Abhirami Vinod \n 23MCA002 \n 26-FEB-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"));

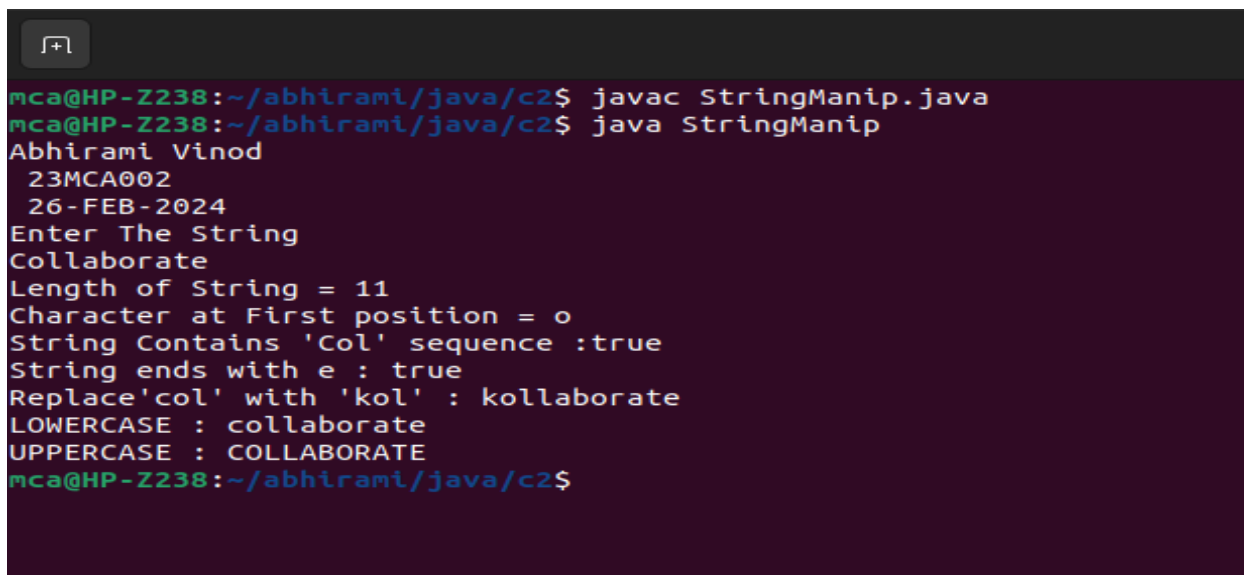
        System.out.println("LOWERCASE : "+str1.toLowerCase());

        System.out.println("UPPERCASE : "+str1.toUpperCase());

    }

}
```

Output:



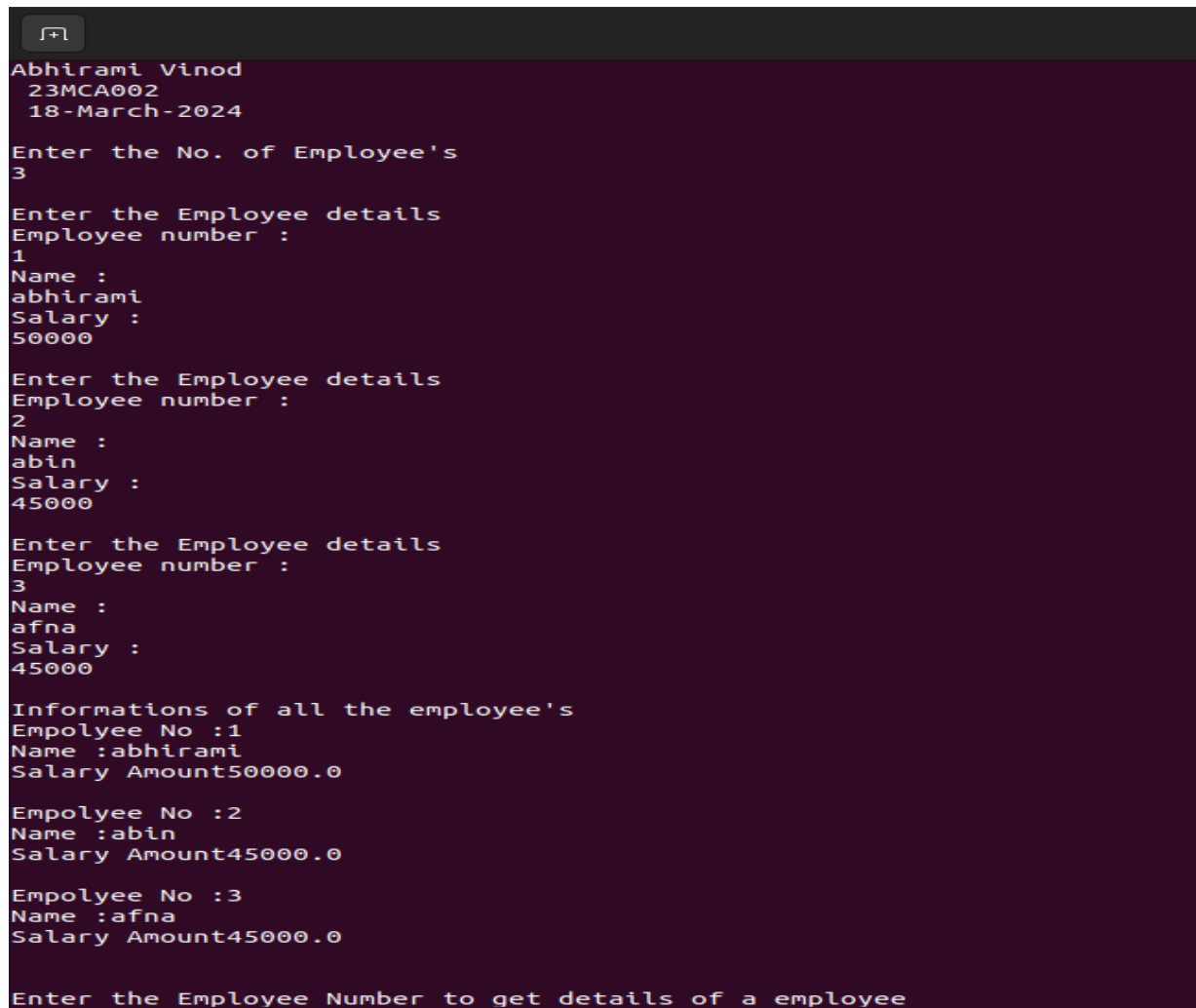
```
mca@HP-Z238:~/abhirami/java/c2$ javac StringManip.java
mca@HP-Z238:~/abhirami/java/c2$ java StringManip
Abhirami Vinod
23MCA002
26-FEB-2024
Enter The String
Collaborate
Length of String = 11
Character at First position = o
String Contains 'Col' sequence :true
String ends with e : true
Replace'col' with 'kol' : kollaborate
LOWERCASE : collaborate
UPPERCASE : COLLABORATE
mca@HP-Z238:~/abhirami/java/c2$
```

9. 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.

Program:

```
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("Abhirami Vinod \n 23MCA002 \n 18-March-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:

```
Abhirami Vinod
23MCA002
18-March-2024

Enter the No. of Employee's
3

Enter the Employee details
Employee number :
1
Name :
abhirami
Salary :
50000

Enter the Employee details
Employee number :
2
Name :
abin
Salary :
45000

Enter the Employee details
Employee number :
3
Name :
afna
Salary :
45000

Informations of all the employee's
Empolyee No :1
Name :abhirami
Salary Amount50000.0

Empolyee No :2
Name :abin
Salary Amount45000.0

Empolyee No :3
Name :afna
Salary Amount45000.0

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