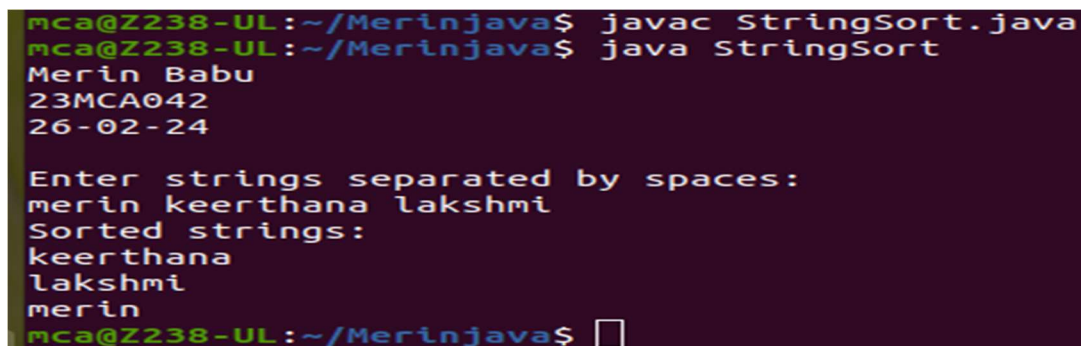## 6. Program to Sort strings

Program:

```
import java.util.Arrays;
import java.util.Scanner;
public class StringSort{
public static void main(String[] args) {
Scanner scanner = new Scanner(System.in);
System.out.println("Merin Babu\n23MCA042 \n26-02-24\n");
System.out.println("Enter strings separated by spaces:");
String input = scanner.nextLine();
String[] strings = input.split("\\s+");
Arrays.sort(strings);
System.out.println("Sorted strings:");
for (String str : strings) {
System.out.println(str);
}
scanner.close();
}
}
```

Output:

```
mca@Z238-UL:~/Merinjava$ javac StringSort.java
mca@Z238-UL:~/Merinjava$ java StringSort
Merin Babu
23MCA042
26-02-24

Enter strings separated by spaces:
merin keerthana lakshmi
Sorted strings:
keerthana
lakshmi
merin
mca@Z238-UL:~/Merinjava$ ▯
```

7. Search an element in an array.

Program:

```java
import java.util.Scanner;
import java.util.Arrays;
class SearchArray{
public static void main(String arg[]){
System.out.println("Merin Babu\n23MCA042 \n26-02-24\n");
Scanner scanner = new Scanner(System.in);
System.out.print("Enter the size of the array : ");
int n = scanner.nextInt();
int arr[] = new int[n];
System.out.println("Enter the array elements : ");
for(int i=0; i<n; i++){
arr[i] = scanner.nextInt();
}
System.out.println("Array is : " + Arrays.toString(arr));
System.out.print("Enter the value to search : ");
int value = scanner.nextInt();
int flag = 0;
for(int i=0; i<n; i++){
if(value == arr[i]){
flag = 1;
break;
}
}
if(flag == 0)
System.out.println("Element " + value + " not found in the array.");
else System.out.println("Element " + value + " found in the array.");
scanner.close();
}
}
```

Output:

```
mca@Z238-UL:~/Merinjava$ javac SearchArray.java
mca@Z238-UL:~/Merinjava$ java SearchArray
Merin Babu
23MCA042
26-02-24

Enter the size of the array : 4
Enter the array elements :
2
4
7
9
Array is : [2, 4, 7, 9]
Enter the value to search : 9
Element 9 found in the array.
```

8. Perform string manipulations

Program:

```java
import java.util.Scanner;
class Manipulation{
public static void main(String args[]){
System.out.println("Merin Babu\n23MCA042 \n27-02-24\n");
Scanner scanner=new Scanner(System.in);
System.out.println("Enter a string : ");
String str=scanner.nextLine();
System.out.println("\nString is : " + str);
System.out.println("Length of the string is : " + str.length());
System.out.println("Character at the first position is : " + str.charAt(0));
System.out.println("LOWERCASE : "+str.toLowerCase());
System.out.println("UPPERCASE : "+str.toUpperCase());
System.out.print("Enter a substring to check : ");
String subStr = scanner.nextLine();
if(str.contains(subStr)) System.out.println("String '" + str + "' contains the substring '" + subStr +
"'");
else System.out.println("String '" + str + "' not contains the substring '" + subStr + "'");
scanner.close();
}
}
```

Output:

```
mca@Z238-UL:~/Merinjava$ javac Manipulation.java
mca@Z238-UL:~/Merinjava$ java Manipulation
Merin Babu
23MCA042
27-02-24

Enter a string:
merin babu
Length of the string: 10
Uppercase string: MERIN BABU
Lowercase string: merin babu
Enter a string to concatenate with:
kanneth
Concatenated string: merin babukanneth
Enter the starting index for substring:
5
Substring:  babu
Enter the character to replace:
m
Enter the replacement character:
e
Replaced string: eerin babu
Enter the delimiter for splitting:
r
Split string:
me
in babu
```

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:

```java
import java.util.Scanner;
class Employee{
int eNo, eSalary;
String eName;
public Employee(int no, String name, int salary) {
this.eNo = no;
this.eName = name;
this.eSalary = salary;}}
class Main{
public static void main(String arg[]){
System.out.println("Merin Babu\n23MCA042 \n27-02-24\n");
Scanner scanner = new Scanner(System.in);
System.out.print("Enter the no of Employees : ");
int n = scanner.nextInt();
Employee arr[] = new Employee[n];
for(int i=0; i<n; i++){
System.out.println("Enter the details of employee " + Integer.toString(i+1));
System.out.print("Enter the employee id : ");
int no = scanner.nextInt();
System.out.print("Enter the employee name : ");
scanner.nextLine();
String name = scanner.nextLine();
System.out.print("Enter the salary : ");
int salary = scanner.nextInt();
arr[i] = new Employee(no, name, salary);}
System.out.print("\nEnter the employee id to search : ");
int id = scanner.nextInt();
int flag = 0;
for(int i=0; i<n; i++){
if(arr[i].eNo == id){
System.out.println("Employee found.\nid : " + Integer.toString(id) + "\nname : " + arr[i].eName
+ "\nsalary : " + Integer.toString(arr[i].eSalary));
flag = 1;
break;}}
if(flag == 0) System.out.println("Employee not found");
scanner.close();
}}
```

Output:

```
mca@Z238-UL:~/Merinjava$ javac Main.java
mca@Z238-UL:~/Merinjava$ java Main
Merin Babu
23MCA042
27-02-24

Enter the no of Employees : 3
Enter the details of employee 1
Enter the employee id : 101
Enter the employee name : Merin Babu
Enter the salary : 85000
Enter the details of employee 2
Enter the employee id : 102
Enter the employee name : Sandra Krishna P S
Enter the salary : 90000
Enter the details of employee 3
Enter the employee id : 103
Enter the employee name : Jeril Joy
Enter the salary : 100000

Enter the employee id to search : 101
Employee found.
id : 101
name : Merin Babu
salary : 85000
```