

String Class

Lab Assignment 4.1

Develop a class StringDemo that demonstrates all the string operations:-

Using Scanner class read two strings s1 and s2. (Give appropriate inputs suiting the function)

Try each of the below functions and write in a word document your observations.

- Explain the prototype of each function ,(each parameters and return value)
- what does the function do
- what is the output

- a. `System.out.println(s1.equals(s2));`
- b. `System.out.println(s1.equalsIgnoreCase(s2));`

- c. `char ch=s1.charAt(4) ;`
`System.out.println("Character at 4th position"+" " +ch);`

- d. `System.out.println(s1.compareTo(s2));`

- e. `s1=s1.concat(s2);`
`System.out.println(s1);`

- f. `System.out.println(s1.contains("India"));`
- g. `System.out.println(s2.endsWith("country"));`

- h. `String sf1=String.format("name is %s",s2);`
`System.out.println(sf1);`

```
i. int index = s1.indexOf(s2);  
   System.out.println(index);
```

```
j. System.out.println(s1.isEmpty());
```

```
k. String joinString1=String.join("-",s1,"to",s2,s1,s2,"towards",s2);  
   System.out.println(joinString1);
```

```
l. int index1=s1.lastIndexOf("country");  
   System.out.println(index1);
```

```
m. System.out.println("string length is: "+s1.length());
```

```
n. String replaceString=s1.replace('a','e');  
   System.out.println(replaceString);
```

```
o. String replaceString=s1.replace("India","europe");  
   System.out.println(replaceString);
```

```
p. String replaceString=s1.replaceAll("India","europe");  
   System.out.println(replaceString);
```

q. `String[] words=s1.split("\\s");//splits the string based on whitespace`

`//using java foreach loop to print elements of string array`

`for(String w:words){`

`System.out.println(w); }*/`

Hint : We use enhanced java for loop to iterate through an array or collection in java. We also call it a for-each loop. In this type, we don't need to mention any condition or increment/decrement value.

`datatype[] arrname = {};`

`for(datatype variable: arrname) {`

`//code`

`}`

r. `System.out.println(s1.startsWith("India"));`

s. `System.out.println(s1.substring(1,4));`

t. `char[] ch = s1.toCharArray();`

`int len = ch.length;`

`System.out.println("Char Array length: " + len);`

`System.out.println("Char Array elements: ");`

`for (int i = 0; i < len; i++) {`

`System.out.println(ch[i]); }`

```
u. String s1lower=s1.toLowerCase();  
  
    System.out.println(s1lower);
```

```
v. String s1upper=s2.toUpperCase();  
  
    System.out.println(s1upper); */
```

```
w. System.out.println(s1); //Without trim()  
  
    String tr = s1.trim();  
  
    System.out.println(tr.length());  
  
    System.out.println(tr); //With trim()
```

```
x. boolean bol = true;  
  
    boolean bol2 = false;  
  
    String s3 = String.valueOf(bol);  
  
    String s4 = String.valueOf(bol2);  
  
    System.out.println(s3);  
  
    System.out.println(s4);
```