**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
  1. System.out.println(s1.equals(s2));

Prototype: boolean equals(Object another)

Description : checks the equality of string with the given object.

// output

false

* 1. System.out.println(s1.equalsIgnoreCase(s2));

Prototype: static String equalsIgnoreCase(String another)

Description: compares another string. It doesn't check case.

//output

false

* 1. char ch=s1.charAt(4) ;

Prototype: char charAt(int index)

Description: returns char value for the particular index



System.out.println("Character at 4th position"+" " +ch);

//output

Character at 4th position a

1. System.out.println(s1.compareTo(s2));

Prototype: int compare(oject)

Description: returns the difference between the first mismatch character

//output

6

1. s1=s1.concat(s2);

Protopype: String concat(object)

Description: returns the concatenated string

System.out.println(s1);

//output

IndiaCountry

1. System.out.println(s1.contains("India"));

Prototype: boolean contains(object)

Description: return a bool if the string is contained or not

//output

true

1. System.out.println(s2.endsWith("country"));

Prototype: Bool endsWith(object)

Description: returns bool if the string ends with the parameter

//output

false

1. String sf1=String.format("name is %s",s2);

Prototype: String format(format,object)

Description: returns a formatted strings

1. System.out.println(sf1);

//output

name is Country





1. int index = s1.indexOf(s2);

Prototype: indexOf(object)

Description: returns the specified char value index.

1. System.out.println(index);

//output

5

1. System.out.println(s1.isEmpty());

Prototype: boolean isEmpty()

Description: returns the boolean of whether the object is empty or not

//output

false

1. String joinString1=String.join("-",s1,"to",s2,s1,s2,"towards",s2);

Prototype: static String join(CharSequence delimiter, CharSequence... elements)

Description: returns a joined string.

1. System.out.println(joinString1);

//output

IndiaCountry-to-Country-IndiaCountry-Country-towards-Country

1. int index1=s1.lastIndexOf("country");

Prototype: int lastIndexOf(object)

Description: return last index of string

1. System.out.println(index1);

//output

-1

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

Prototype: int length()

Description: return the length of string

//output

string length is: 12

1. String replaceString=s1.replace('a','e');

Prototype: String return a string

Description:returns new string with corresponding character replaced.

1. System.out.println(replaceString);

IndieCountry

1. String replaceString=s1.replace("India","europe");

Prototype: return a string

Description: replace the corresponding string

1. System.out.println(replaceString);

//output

europeCountry

1. String replaceString=s1.replaceAll("India","europe");

Prototype: return a string

Description: replace all occurrence of replace parameter

1. System.out.println(replaceString);

//output

europeCountry





1. 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**

**}**

1. System.out.println(s1.startsWith("India"));
2. System.out.println(s1.substring(1,4));
3. 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]); }



1. String s1lower=s1.toLowerCase(); System.out.println(s1lower);
2. String s1upper=s2.toUpperCase(); System.out.println(s1upper); \*/
3. System.out.println(s1); //Without trim() String tr = s1.trim(); System.out.println(tr.length()); System.out.println(tr); //With trim()
4. boolean bol = true;



boolean bol2 = false;

String s3 = String.valueOf(bol);

String s4 = String.valueOf(bol2);

System.out.println(s3);

System.out.println(s4);