

## Task - 3

### String Operations

Date: 22<sup>nd</sup> Sept 2024

#### Exercise 1

Program to accept a String & find the length of a String

```
C:\Users\BELCY\OneDrive\Documents\Zoho_task\Z_training\Task_3\myprojectfiles\com>javac .\task\StringTask.java -d ../..\myclassfiles
C:\Users\BELCY\OneDrive\Documents\Zoho_task\Z_training\Task_3\myprojectfiles\com>javac .\runner\StringRunner.java -d ../..\myclassfiles -cp ../..\myclassfiles
C:\Users\BELCY\OneDrive\Documents\Zoho_task\Z_training\Task_3\myprojectfiles\com>java -cp ../..\myclassfiles com.runner.StringRunner
S.no Functions
1. Find the length of a String
2. Convert string into character Array
3. Find penultimate character
4. Find the number of occurrences of a given letter/character
5. Find the greatest position of the given letter/character.
6. Print the last 5 characters of a given String.
7. Print the first 3 characters of a given String
8. Replace the first 3 characters of a String with "XYZ"
9. Check whether a String starts with "ent"
10. Check whether a String ends with "le"
11. Convert all lowercase string to uppercase string
12. Convert all uppercase string to lowercase string
13. Reverse a String
14. Accept a line with multiple Strings
15. Concatenate multiple strings without space
16. Multiple strings to string array
17. Merge multiple strings with "-" in between
18. Check equality of 2 strings - Case sensitive
19. Check equality of 2 strings - Case insensitive
20. String with a space at the end & beginning or both and output the proper String with no space either at the beginning or end
21. Exit
Please enter the corresponding serial number to perform the required function:1
No string provided as command line argument ,try running the file again with the arguments
```

```
C:\Users\BELCY\OneDrive\Documents\Zoho_task\Z_training\Task_3\myprojectfiles\com>java -cp ../..\myclassfiles com.runner.StringRunner
belcy
S.no Functions
1. Find the length of a String
2. Convert string into character Array
3. Find penultimate character
4. Find the number of occurrences of a given letter/character
5. Find the greatest position of the given letter/character.
6. Print the last 5 characters of a given String.
7. Print the first 3 characters of a given String
8. Replace the first 3 characters of a String with "XYZ"
9. Check whether a String starts with "ent"
10. Check whether a String ends with "le"
11. Convert all lowercase string to uppercase string
12. Convert all uppercase string to lowercase string
13. Reverse a String
14. Accept a line with multiple Strings
15. Concatenate multiple strings without space
16. Multiple strings to string array
17. Merge multiple strings with "-" in between
18. Check equality of 2 strings - Case sensitive
19. Check equality of 2 strings - Case insensitive
20. String with a space at the end & beginning or both and output the proper String with no space either at the beginning or end
21. Exit
Please enter the corresponding serial number to perform the required function:1
The length of the string belcy = 5
```

#### Exercise 2

Accept a String & convert it into character Array

```
Please enter the corresponding serial number to perform the required function:2
Enter the string :belcy
belcy on converting to character array...
b e l c y
```

#### Exercise 3

Find penultimate character

```
Please enter the corresponding serial number to perform the required function:3
Enter the string :belcy
The penultimate character of the string belcy is c
```

```
Please enter the corresponding serial number to perform the required function:3
Enter the string :hi
String is too small to find penultimate character, try giving string size greater than 3
```

## Exercise 4

Find the number of occurrences of a given letter/character

```
Please enter the corresponding serial number to perform the required function:4
Enter the string :hello
Enter the character :l
The number of occurrences of l in the string hello is 2
Do you want to check for another letter/character (Enter 'y' for yes and 'n' for no) :y
Enter the character :h
The number of occurrences of h in the string hello is 1
Do you want to check for another letter/character (Enter 'y' for yes and 'n' for no) :y
Enter the character :z
The number of occurrences of z in the string hello is 0
Do you want to check for another letter/character (Enter 'y' for yes and 'n' for no) :n
```

## Exercise 5

Find the greatest position of the given letter/character.

```
Please enter the corresponding serial number to perform the required function:5
Enter the string :hello
Enter the character :l
The greatest position of l in the string hello is 4
Do you want to check for another letter/character (Enter 'y' for yes and 'n' for no) :y
Enter the character :o
The greatest position of o in the string hello is 5
Do you want to check for another letter/character (Enter 'y' for yes and 'n' for no) :y
Enter the character :z
Character z is not found in the string hello
Do you want to check for another letter/character (Enter 'y' for yes and 'n' for no) :n
```

## Exercise 6

Print the last 5 characters of a given String

```
Please enter the corresponding serial number to perform the required function:6
Enter the string :arockiyabelcy
The last 5 characters of the string arockiyabelcy is belcy
```

```
Please enter the corresponding serial number to perform the required function:6
Enter the string :hai
String is too small to print the last five characters, try giving string size atleast greater than 4
```

## Exercise 7

Print the first 3 characters of a given String

```
Please enter the corresponding serial number to perform the required function:7
Enter the string :belcy
The first 3 characters of the string belcy is bel
```

```
Please enter the corresponding serial number to perform the required function:7
Enter the string :hi
String is too small to print the first three characters, try giving string size atleast greater than 2
```

## Exercise 8

Replace the first 3 characters of a String with "XYZ"

```
Please enter the corresponding serial number to perform the required function:8
Enter the string :belcy
On replacing the first three characters of the string belcy with XYZ, it became XYZcy
```

```
Please enter the corresponding serial number to perform the required function:8
Enter the string :ha
String is too small to replace the first three characters, try giving string size atleast greater than 2
```

```
Please enter the corresponding serial number to perform the required function:8
Enter the string :hai
On replacing the first three characters of the string hai with XYZ, it became XYZ
```

### Exercise 9

Check whether a String starts with "ent"

```
Please enter the corresponding serial number to perform the required function:9
Enter the string :belcy
The String belcy does not start with "ent"
```

```
Please enter the corresponding serial number to perform the required function:9
Enter the string :entity
The String entity starts with "ent"
```

### Exercise 10

Check whether a String ends with "le"

```
Please enter the corresponding serial number to perform the required function:10
Enter the string :apple
The String apple ends with "le"
```

```
Please enter the corresponding serial number to perform the required function:10
Enter the string :belcy
The String belcy does not end with "le"
```

### Exercise 11

Convert all lowercase string to uppercase string

```
Please enter the corresponding serial number to perform the required function:11
Enter the string :belcy
belcy->BELCY
```

```
Please enter the corresponding serial number to perform the required function:11
Enter the string :Belcy
Belcy->BELCY
```

### Exercise 12

Convert all uppercase string to lowercase string

```
Please enter the corresponding serial number to perform the required function:12
Enter the string :BELCY
BELCY->belcy
```

```
Please enter the corresponding serial number to perform the required function:12
Enter the string :Belcy
Belcy->belcy
```

### Exercise 13

Reverse a String

```
Please enter the corresponding serial number to perform the required function:13
Enter the string :belcy
belcy->ycleb
```

```
Please enter the corresponding serial number to perform the required function:13
Enter the string :racecar
racecar->racecar
```

### Exercise 14

Accept a line with multiple Strings

```
Please enter the corresponding serial number to perform the required function:14
Enter the string :I am belcy
You entered: I am belcy
```

### Exercise 15

Concatenate multiple strings without space

```
Please enter the corresponding serial number to perform the required function:15
Enter the string :Belcy here!
After concatenation of strings without space: Belcyhere!
```

### Exercise 16

Multiple strings to string array

```
Please enter the corresponding serial number to perform the required function:16
Enter the string :I am Belcy
The string array : {"I","am","Belcy"}
```

### Exercise 17

Merge multiple strings with "-" in between

```
Please enter the corresponding serial number to perform the required function:17
Enter the number of strings :3
Enter string 1:I
Enter string 2:am
Enter string 3:Belcy
The string after merging with hyphen:I-am-Belcy
```

### Exercise 18

Check equality of 2 strings - Case sensitive

```
Please enter the corresponding serial number to perform the required function:18
Enter the strings to check whether they are equal (case sensitive):
Enter the string :Belcy
Enter the string :Belcy
true
```

```
Please enter the corresponding serial number to perform the required function:18
Enter the strings to check whether they are equal (case sensitive):
Enter the string :Belcy
Enter the string :belcy
false
```

### Exercise 19

Check equality of 2 strings - Case insensitive

```
Please enter the corresponding serial number to perform the required function:19
Enter the strings to check whether they are equal (case insensitive):
Enter the string :Belcy
Enter the string :Belcy
true
```

```
Please enter the corresponding serial number to perform the required function:19
Enter the strings to check whether they are equal (case insensitive):
Enter the string :belcy
Enter the string :Belcy
true
```

## Exercise 20

String with a space at the end & beginning or both and output the proper String with no space either at the beginning or end

```
Please enter the corresponding serial number to perform the required function:20
Enter the string : I have space in the front and back
The string before trimming : " I have space in the front and back "
The length of the string before trimming: 36
The string after trimming: "I have space in the front and back"
The length of the string after trimming: 34
```

```
Please enter the corresponding serial number to perform the required function:20
Enter the string :I have a space at the end alone
The string before trimming : "I have a space at the end alone"
The length of the string before trimming: 31
The string after trimming: "I have a space at the end alone"
The length of the string after trimming: 31
```

```
Please enter the corresponding serial number to perform the required function:20
Enter the string : I have a space at the front alone
The string before trimming : " I have a space at the front alone"
The length of the string before trimming: 34
The string after trimming: "I have a space at the front alone"
The length of the string after trimming: 33
```