



# SCSA2601-Machine Learning and Data Analytics Lab

Dashboard / My courses / ML and DA / VIRTUAL PROGRAMMING - PYTHON / Count the special characters, alphabets, digits, lowercase and uppercase characters.

**Started on** Friday, 17 December 2021, 2:22 PM

**State** Finished

**Completed on** Friday, 17 December 2021, 3:39 PM

**Time taken** 1 hour 16 mins

**Marks** 3.00/3.00

**Grade** 10.00 out of 10.00 (100%)

## Question 1

Correct

Mark 1.00 out of 1.00

Flag question

From the given string input, count the special characters, alphabets, digits, lowercase and uppercase characters.

Input: Sathyabama 2019 @

Output: Digits: 4 Alphabets: 10 Special Characters: 1 Lowercase: 9 Uppercase: 1

Answer: (penalty regime: 0 %)

```
1 import sys
2 strr = sys.stdin.readline()
3 string = str(strr)
```

## Quiz navigation



Finish review

Output: Digits: 4 Alphabets: 10 Special Characters: 1 Lowercase: 9 Uppercase: 1

Answer: (penalty regime: 0 %)

```
1 import sys
2 strr = sys.stdin.readline()
3 string = str(strr)
4 tot_char = len(string)
5 if tot_char == 0:
6     print(" ")
7 else:
8     all_digits = ['0','1','2','3','4','5','6','7','8','9']
9     all_low = ['a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v']
10    all_up = ['A','B','C','D','E','F','G','H','I','J','K','L','M','N','O','P','Q','R','S','T','U','V']
11    sp = [' ']
12    tot_dig = 0
13    tot_sp = 0
14    tot_low = 0
15    tot_up = 0
16    for s in string:
17        if s in all_digits:
18            tot_dig += 1
19        elif s in all_low:
20            tot_low += 1
21        elif s in all_up:
22            tot_up += 1
23    print(tot_dig, tot_low, tot_up, tot_sp)
```

Test	Input	Expected	Got
✓	Case1 Sathyabama 2019 @	Digits: 4 Alphabets: 10 Special Characters: 1 Lowercase: 9 Uppercase: 1	Digits: 4 Alphabets: 10 Special Characters: 1 Lowercase: 9 Uppercase: 1

Output: Digits: 4 Alphabets: 10 Special Characters: 1 Lowercase: 9 Uppercase: 1

Answer: (penalty regime: 0 %)

```
10 all_up = ['A','B','C','D','E','F','G','H','I','J','K','L','M','N','O','P','Q','R','S','T','U','V']
11 sp = [' ']
12 tot_dig = 0
13 tot_sp = 0
14 tot_low = 0
15 tot_up = 0
16 for s in string:
17     if s in all_digits:
18         tot_dig += 1
19     elif s in all_low:
20         tot_low += 1
21     elif s in all_up:
22         tot_up += 1
23     elif s in sp:
24         tot_sp += 1
25 tot_alp = tot_low + tot_up
26 tot_spc = tot_char - tot_alp - tot_dig - tot_sp - 1
27 print("Digits:",tot_dig,"\nAlphabets:",tot_alp,"\nSpecial Characters:",tot_spc,"\nLowercase:",tot_low)
28 Case1 = 0
29 Case2 = 0
30 Case3 = 0
```

Test	Input	Expected	Got
✓	Case1 Sathyabama 2019 @	Digits: 4 Alphabets: 10 Special Characters: 1 Lowercase: 9 Uppercase: 1	Digits: 4 Alphabets: 10 Special Characters: 1 Lowercase: 9 Uppercase: 1

```
21 +         elif s in all_up:
22 +             tot_up += 1
23 +         elif s in sp:
24 +             tot_sp += 1
25 +     tot_alp = tot_low + tot_up
26 +     tot_spc = tot_char - tot_alp - tot_dig - tot_sp - 1
27 +     print("Digits:",tot_dig,"\nAlphabets:",tot_alp,"\nSpecial Characters:",tot_spc,"\nLowercase:",tot
28 + Case1 = 0
29 + Case2 = 0
30 + Case3 = 0
```

Test	Input	Expected	Got	
✓ Case1	Sathyabama 2019 @	Digits: 4 Alphabets: 10 Special Characters: 1 Lowercase: 9 Uppercase: 1	Digits: 4 Alphabets: 10 Special Characters: 1 Lowercase: 9 Uppercase: 1	✓
✓ Case2	Python Version 3	Digits: 1 Alphabets: 13 Special Characters: 0 Lowercase: 11 Uppercase: 2	Digits: 1 Alphabets: 13 Special Characters: 0 Lowercase: 11 Uppercase: 2	✓
✓ Case3				✓

Passed all tests! ✓

Submit

Marks for this submission: 1.00/1.00.