

HOMWORK-2

S.MALATHY, B.E-CSE

DOMAIN:DATA SCIENCE WITH AI-ML

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1.Using python program to calculate the occurrence of each character in string

Example:1

Program:

```
def calculate_character_frequency(string):
    frequency = {}

    for char in string:
        if char in frequency:
            frequency[char] += 1
        else:
            frequency[char] = 1

    return frequency

# Test the program
string = "S.MALATHY SIVAPRAKASAM"

character_frequency = calculate_character_frequency(string)

print("Character Frequency:")
for char, freq in character_frequency.items():
    print(char, ":", freq)
```

output:

Character Frequency:

S : 3

. : 1

M : 2

A : 6

L:1

T:1

H:1

Y:1

:1

I:1

V:1

P:2

R:1

K:1

Example:2

Program:

```
def character_frequency(string):  
    frequency = {}  
  
    for char in string:  
        if char in frequency:  
            frequency[char] += 1  
        else:  
            frequency[char] = 1  
  
    return frequency  
  
# Test the program  
input_string = input("Enter a string: ")  
  
result = character_frequency(input_string)  
  
print("Character frequency:")  
for char, freq in result.items():  
    print(char, "->", freq)
```

output:

Enter a string: malu

Character frequency:

m -> 1

a -> 1

l -> 1

u -> 1

“if I using both capitals and lowercase letters means we get an output as:”

Enter a string: MalatHY ShiyaMAla

Character frequency:

M -> 2

a -> 4

l -> 2

t -> 1

H -> 1

Y -> 1

-> 1

S -> 1

h -> 1

i -> 1

y -> 1

A -> 1

Another one example of output:

Enter a string: MaluBAby

Character frequency:

M -> 1

a -> 1

l -> 1

u -> 1

B -> 1

A -> 1

b -> 1

y -> 1