HOMEWORK-2

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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:

```python
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 = "M.HARISH KRISHNAN"

character_frequency = calculate_character_frequency(string)

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

Output:

Character Frequency:

M : 1

. : 1

H : 3

A : 2

R : 2

I : 2

S : 2

 : 1

K : 1

N : 2

Example:2

Program:

```python
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: krishna

Character frequency:

k -> 1

r -> 1

i -> 1

s -> 1

h -> 1

n -> 1

a -> 1

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

Enter a string: HaRiSh

Character frequency:

H -> 1

a -> 1

R -> 1

i -> 1

S -> 1

h -> 1

Another one example of output:

Enter a string: JohN WIck

Character frequency:

J -> 1

o -> 1

h -> 1

N -> 1

  -> 1

W -> 1

I -> 1

c -> 1

k -> 1