

# Python Programming Practical

## Practical 2

- Write a function that takes a character (i.e. a string of length 1) and returns True if it is a vowel, False otherwise.

### TYPE 1

\*2.a. Write a function that takes a character (i.e. a string of length 1) and. py - C:/Users/Gauri/Downloads/2.a. Write a function that takes a character (i.e. a string of length 1) and.

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```
"""Write a function that takes a character (i.e. a string of length 1) and
returns True if it is a vowel, False otherwise"""
```

```
#TYPE 1
```

```
#function definition
```

```
def is_vowel(char):
```

```
    if(char=='a' or char=='A' or char=='e' or char=='E'
        or char=='i' or char=='I' or char=='o' or char=='O'
        or char=='u' or char=='U'):
```

```
        print(char, "is a vowel")
```

```
    else:
```

```
        print(char, "is not a vowel")
```

```
#function call
```

```
char=input("enter a character")
```

```
is_vowel(char)
```

### OUTPUT

```
>>>
```

```
enter a characterk
```

```
k is not a vowel
```

```
>>> =====
```

```
=====
```

```
>>>
```

```
enter a characterO
```

```
o is vowel
```

**TYPE 2**

\*2.a. Write a function that takes a character (i.e. a string of length 1) and.py - C:/Users/Gauri/Downloads/2.a. Write a function that takes a character (i.e. a string of length 1) and.py (3.4.3)\*

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```

"""Write a function that takes a character (i.e. a string of length 1) and
returns True if it is a vowel, False otherwise"""
#TYPE 2
#function definition
def check_vowel(char):
    check="aeiou" #already characters will be in lower case so no need of "AEIOU"
    if char in check:
        print(char , "is vowel")
    else:
        print(char , "is not a vowel")
#function call
char=input("enter a character")
check_vowel(char.lower()) #lower() converts character to lower case and passes it to function

```

**OUTPUT**

```

>>>
enter a characterk
k is not a vowel
>>> =====
=====
>>>
enter a characterO
o is vowel

```

- **Define a function that computes the length of a given list or string.**

```
2.b.Define a function that computes the length of a given list or string.py - C:/Users/Gauri/Downloads/2.b.Define a function that computes the len
File Edit Format Run Options Window Help
"""
Define a function that computes the length of a given list or string.
"""
def length_of_string(any_string):
    count = 0
    for i in any_string:
        count += 1
    return count

itv=input("enter string")
t=length_of_string(itv)
print(t)
```

### OUTPUT

```
>>>
```

```
enter stringitvoyagers
10
```

- **Define a procedure histogram() that takes a list of integers and prints a histogram to the screen. For example,**

**histogram([4, 9, 7]) should print the following:**

```
****
```

```
*****
```

```
*****
```

2.c.Define a procedure histogram() that takes a list of integers and.py - C:/Users/Gauri/Downloads/2.c.Define a procedure histogram() that takes a li

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```
"""Define a procedure histogram() that takes a list of integers and
prints a histogram to the screen.
```

```
For example, histogram([4, 9, 7]) should print the following:
```

```
****
```

```
*****
```

```
*****
```

```
"""
```

```
def histogram(list1):
```

```
    for i in range(len(list1)):
```

```
        print (list1[i] * '*')
```

```
#list = [4,9,7]
```

```
#we can directly pass the list or we can take values as below
```

```
histogram([4,9,7])
```

```
a = int(input("Enter 1st value for list"))
```

```
b = int(input("Enter 2nd value for list"))
```

```
c = int(input("Enter 3rd value for list"))
```

```
L = [a,b,c]
```

```
histogram(L)
```

## OUTPUT

```
>>>
```

```
****
```

```
*****
```

```
*****
```

```
Enter 1st value for list10
```

```
Enter 2nd value for list8
```

```
Enter 3rd value for list6
```

```
*****
```

```
*****
```

```
*****
```