**Assignment Questions**

**module 3 (chapter 1 and 2)**

**Date:25-06-2020**

1. Generate first N number of Fibonacci numbers. Take N value from user

nterms = int(input("How many terms”)

n1, n2 = 0, 1

count = 0

if nterms <= 0:

print("Please enter a positive integer")

elif nterms == 1:

print("Fibonacci sequence upto",nterms,":")

print(n1)

else:

print("Fibonacci sequence:")

while count < nterms:

print(n1)

nth = n1 + n2

n1 = n2

n2 = nth

count += 1

**Output**

How many terms? 7

Fibonacci sequence:

0

1

1

2

3

5

8

1. Take 10 integers from keyboard using loop and print their average value on the screen

num = int(input('How many numbers: '))

total\_sum = 0

for n in range(num):

numbers = float(input('Enter number : '))

total\_sum += numbers

avg = total\_sum/num

print('Average of ', num, ' numbers is :', avg)

**Output:**

How many numbers:10

Enter number:1

Enter number:2

Enter number:3

Enter number:4

Enter number:5

Enter number:6

Enter number:7

Enter number:8

Enter number:9

Enter number:10

Average of 10 numbers is:5.5

1. Print the following patterns using loop :

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**\*\***

**\*\*\***

**\*\*\*\***

rows = 4

for i in range(0, rows):

for j in range(0, i + 1):

print("\*", end=' ')

print("\r")

1. Write a program to find the length of the string "refrigerator" without using len( ) function.

str = input("Enter a string: ")

counter =0

for s in str:

counter = counter+1

print("Length of the input string is:", counter)

**Output:**

Enter a string: Refrigerator

Length of the input string is: 12

1. Write a Python program to count the number of characters (character frequency) in a string.

def char\_frequency(str1):

dict = {}

for n in str1:

keys = dict.keys()

if n in keys:

dict[n] += 1

else:

dict[n] = 1

return dict

print(char\_frequency('google.com'))

**Output:**

{'o': 3, '.': 1, 'g': 2, 'l': 1, 'e': 1, 'c': 1, 'm': 1}

1. Write a Python script that takes input from the user and displays that input back in upper and lower cases

user\_input = input("What's your favourite language? ")

print("My favourite language is ", user\_input.upper())

print("My favourite language is ", user\_input.lower())

**Output:**

What's your favourite language? english

My favourite language is ENGLISH

My favourite language is english

1. Write a Python program to count occurrences of a substring in a string.

str1 = 'The quick brown fox jumps over the lazy dog.'

print()

print(str1.count("fox"))

print()

**Output:**

1