

Department of Electrical Engineering

Mid – Term Assignment Spring 2020

Date: 25/06/2020

Course Details

Course Title: Programming Fundamentals
Instructor: sir waqas

Module: 02
Total Marks: 50

Student Details

Name: m Idrees khan

Student ID: 16431

Q1.	(a)	Write Python code that asks the user for two integer values, it must then add the largest number times the smallest. The output should be in the following manner. <div style="text-align: center;"> Enter Number 1 : 5 Enter Number 2 : 3 Answer = 5+5+5 = 15 </div>	Marks 5 CLO 1
	(b)	You are asked to make a times table program in Python where a user will enter starting value, ending value and the value to find the times table for. For example <div style="text-align: center;"> Input Starting Value : 2 Input Ending Value : 4 Input Times Table : 4 4 x 2 = 8 4 x 3 = 12 4 x 4 = 16 </div>	Marks 5 CLO 1
Q2.	(a)	Write programs in Python to make the following shapes using LOOPS, a) ***** ***** ***** b) * ** *** **** *****	Marks 14 CLO 1
	(a)	Write a program in Python where a user is asked for 10 numbers, each number must be shown as ODD or EVEN respectively.	Marks 3 CLO 1
Q3.	(b)	You have the following python code, draw the flow chart of the whole code <pre> 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 </pre>	Marks 3 CLO 1

		count += 1	
--	--	------------	--

fhg.py - C:/Users/PUBG PC/AppData/Lo

File Edit Format Run Options Window He

```
#Q 1. Part (a)
```

```
a = int(input("Enter number 1: "))
```

```
b = int(input("Enter number 2: "))
```

```
sum = 0
```

```
if a > b:
```

```
    for x in range(b):
```

```
        sum = a + sum
```

```
    print("Answer: ", sum)
```

```
else:
```

```
    for x in range(a):
```

```
        sum = b + sum
```

```
    print("Answer:", sum)
```


File Edit Shell Debug Options Window

Python 3.8.3rc1 (tags/v3.8.3rc1
it (AMD64)] on win32

Type "help", "copyright", "credi

>>>

==== RESTART: C:/Users/PUBG PC/A

Enter number 1: 4

Enter number 2: 3

Answer: 12

>>>

I

x +

gf.py - C:/Users/PUBG PC/AppData/Local/Program

File Edit Format Run Options Window Help

#Q.1 Part (b)

```
startNum= int(input("Enter number 1: "))  
endNum= int(input("Enter number 2: "))  
tableNum= int(input("Enter number 3: "))
```

```
for x in range(startNum, endNum+1):  
    ans = tableNum*x  
    print(tableNum, "x", x, "=", ans)
```


atsApp

x

+

*Python

File Edit Shell Debug Options Window Help

Python 3.8.3rc1 (tags/v3.8.3rc1:802eb
it (AMD64)] on win32

Type "help", "copyright", "credits" or
>>>

==== RESTART: C:/Users/PUBG PC/AppData

Enter number 1: 3

Enter number 2: 2

Enter number 3: 4

I

```
gf.py - C:/Users/PUBG PC/AppData/Local/Programs/Python/Python38/gf.py (3.8...
File Edit Format Run Options Window Help
#Q NO 2
#ANs
rows = int(input("Please Enter the Total Number of Rows : "))
columns = int(input("Please Enter the Total Number of Columns : "))

print("Rectangle Star Pattern")
for i in range(rows):
    for j in range(columns):
        print('*', end = ' ')
    print()
```

```
Python 3.8.3rc1 (tags/v3.8.3rc1:802eb67, Apr 29 2020, 21:39:14) [MSC v.1924 64
it (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
==== RESTART: C:/Users/PUBG PC/AppData/Local/Programs/Python/Python38/gf.py
Please Enter the Total Number of Rows : 3
Please Enter the Total Number of Columns : 6
Rectangle Star Pattern
* * * * *
* * * * *
* * * * *
>>> |
```

gf.py - C:/Users/PUBG PC/AppData/Local/Programs/Python

File Edit Format Run Options Window Help

```
#Qno 2 :part b
```

```
#ANS:
```

```
def triangle(n):
```

```
    # number of spaces
```

```
    k = 2*n - 2
```

```
    # outer loop to handle number of rows
    for i in range(0, n):
```

```
        for j in range(0, k):
            print(end=" ")
```

```
        # decrementing k after each loop
        k = k - 1
```

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

```
            # printing stars
            print("* ", end="")
```

```
        # ending line after each row
        print("\r")
```

```
# Driver Code
```

```
n = 5
```

```
triangle(n)
```

I

Insert

Page Layout

References

Mailings

Python

File Edit Shell Debug Options Window Help

Python 3.8.3rc1 (tags/v3.8.3rc1:802eb67
it (AMD64)] on win32

Type "help", "copyright", "credits" or
>>>

==== RESTART: C:/Users/PUBG PC/AppData/

```
      *
     * *
    * * *
   * * * *
  * * * * *
```

>>> |

*gf.py - C:/Users/PUBG PC/AppData/Local/Programs/Python/Python38-64/Python.exe

#Q no 3 (a) :
#ANS:

```
a=[]  
n=int(input("Enter number of elements:"))  
for i in range(1,n+1):  
    b=int(input("Enter element:"))  
    a.append(b)  
even=[]  
odd=[]  
for j in a:  
    if(j%2==0):  
        even.append(j)  
    else:  
        odd.append(j)  
print("The even list",even)  
print("The odd list",odd)
```


Python 3

File Edit Shell Debug Options Window Help

Python 3.8.3rc1 (tags/v3.8.3rc1:802eb67,
it (AMD64)] on win32

Type "help", "copyright", "credits" or "
>>>

==== RESTART: C:/Users/PUBG PC/AppData/Lo

Enter number of elements:10

Enter element:4

Enter element:9

Enter element:76

Enter element:456

Enter element:76

Enter element:8

Enter element:3

Enter element:67

Enter element:6

Enter element:3

The even list [4, 76, 456, 76, 8, 6]

The odd list [9, 3, 67, 3]

>>> |

Flow Chart 21-



