PYTHON ASSIGNMENT: 2

1. Write a Python program to find those numbers which are divisible by 7 and multiple of 5, between 1500 and 2700 (both included).

for i in range(1500,2700):

if(i%35==0):

print(i)

2. Write a Python program to convert temperatures to and from Celsius, Fahrenheit. (Hint: Enter- 45F or 98C) Formula: C = (5/9) \* (F - 32)

temp=input("Enter Temperature in C or F: ")

a=len(temp)

if (temp[a-1]=='F'):

print("Value in C: ",(5/9)\*(float(temp[0:a-1])-32))

elif (temp[a-1]=='C'):

print("Value in F: ",((9/5)\*(float(temp[0:a-1]))+32))

3. Write a Python program to get the Fibonacci series between 0 to 50. (Hint: initially a=0, b=1 and a=a+b, b=a+b) 0, 1, 1, 2, 3, 5, 8, 13, 21

a=0

b=1

print(a)

print(b)

for i in range(1,50):

c=a+b

if(c>50):

break

print(c)

a=b

b=c

4. Write a Python program which iterates the integers from 1 to 50. For multiples of three print "Fizz" instead of the number and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "FizzBuzz".

for i in range(1,51):

if(i%3==0):

print("Fizz")

elif(i%5==0):

print("Buzz")

elif(i%15==0):

print("FizzBuzz")

else:

print(i)

5. Write a Python program that accepts a string and calculate the number of digits and letters. (Hint: c.isdigit() and c.isalpha())

mystr=input("Enter String: ")

dcount=0

acount=0

for a in mystr:

if (a.isdigit()):

dcount=dcount+1

elif(a.isalpha()):

acount=acount+1

print("Number of Digit :",dcount)

print("number of Alpha :",acount)

6. Write a Python program to print alphabet pattern 'Z'.

i=int(input("Enter input: "))

mystr=" "

print("\*"\*i)

for j in range (i-1):

mystr=" "\*(i-j-1)+"\*"

print(mystr)

print("\*"\*i)

7. Write a Python program to print the following patterns ‘S’.

a=int(input("Enter a int: "))

mystr=" "+("\*"\*(a-1))

print(mystr)

for i in range(a):

print("\*")

print(mystr)

mystr1=" "\*(a-1)+"\*"

for i in range(a):

print(mystr1)

print(mystr)

8. Write a Python program to construct the following pattern, using a nested loop number. Go to the editor Expected Output:

1 22 333 4444 55555 666666 7777777 88888888 999999999

[print(str(i)\*i )for i in range(10)]

9.Write a Python program that accepts a word from the user and reverse it. (Without word[::-1])

mystr=input("Enter your name")

ch=""

for i in mystr:

ch=i+ch

print(ch)

10.Write a Python program to calculate the sum and average of n integer numbers (input from the user). Input 0 to finish.

n=int(input("Enter number of Numbers: "))

sum=0

for i in range(n):

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

sum=sum+a

print("Sum :",sum)

print("Avg: ",sum/n)

-----------------------------------------------------------------------------------

PYTHON ASSIGNMENT: 3

1. Write a Python program to sum all the items in a list.

l=[3,4,5,6,7]

sum=0

for i in l:

sum=sum+i

print(sum)

2. Write a Python program to check a list is empty or not

l1=[]

l2=["a"]

if(len(l1)==0):

print("Empty List")

elif(len(l1)!=0):

print("Non-Empty List")

3. Write a Python program to print a specified list after removing the 0th, 4th and 5th elements.

l=["a",2,3,"sdsa",5,6,9]

l.pop(5)

l.pop(4)

l.pop(0)

print(l)

4. Write a Python program to shuffle and print a specified list. (Hint: from random import shuffle)

from random import shuffle

l=[12,23,45,56,99,63,15]

print(l)

shuffle(l)

print(l)

5. Write a Python program to convert a string to a list.

mystr=input("Enter a String")

mylist=list(mystr)

print(mylist)

6. Write a Python program to extend a list without append. (Hint: x[:0]=y or x[len(x):]=y) Sample data: x=[10, 20, 30] y=[40, 50, 60] Expected output : [40, 50, 60, 10, 20, 30] or [10, 20, 30, 40,50,60]

x=[10,20,30]

y=[40,50,60]

x[:0]=y

print(x)

7. Write a Python program to insert a given string at the beginning of all items in a list Sample list : [1,2,3,4], string : emp Expected output : ['emp1', 'emp2', 'emp3', 'emp4']

l=[1,2,3,4]

mystr="emp"

print(l)

for i in range(len(l)):

l[i]=mystr+str(l[i])

print(l)

8. Write a Python program to replace the last element in a list with another list. (Sample data : [1, 3, 5, 7, 9, 10], [2, 4, 6, 8] Expected Output: [1, 3, 5, 7, 9, 2, 4, 6, 8])

l1=[1,3,5,7,9,10]

l2=[2,4,6,8]

l1[len(l1)-1: ]=l2

print(l1)

9. Write a Python program to get the frequency of the elements in a list. (import collections)

l=[1,2,3,5,6,5,5,7,8,7]

print(l.count(5))

10. Write a Python program to clone or copy a list

l=[1,2,3,5,6,7]

l2=l.copy()

print(l2)

-----------------------------------------------------------------------------------