**Conceptual Understanding Test-III (Advanced Python)**

* A
* . Write a Python program where a string will start with a specific number.

**s='python django'**

**print(s.startswith('p'))**

**output:**

**True**

* Write a Python program to replace whitespaces with an underscore and vice versa.

**s='python django'**

**print(s.replace(' ','-'))**

**output:**

**python-django**

* Write a Python program to select a random date in the current year.

from datetime import date

import random

s=date.today().replace(day=1,month=1).toordinal()

f=date.today().toordinal()

print(date.fromordinal(random.randint(s,f)))

output:

2021-05-16

* Write a Python program to insert values to a table from user input.

number=int(input('enter number'))

name=input('enter name: ')

insert into Employee(id,name) values(1,'somu');

* Write a Python program to create a Mysql database connection to a database that resides in the memory.

import mysal as sql

conn=sql.connect('Employee.db')

curs=conn.cursor()

curs.execute('create table Employee(name,age,contact)

print('table is created')

output:

table is created

* Write a Python program to create an iterator to get specified number of permutations of elements

l=[1,2,3,4]

i=iter(l)

print(next(i))

print(next(i))

print(next(i))

print(next(i))

output:

1234

* Write a Python program to add two given lists using map and lambda.

Original list:

[1, 2, 3]

[4, 5, 6]

Result: after adding two list

[5, 7, 9]

a=[1,2,3]

b=[4,5,6]

print(list(map((lambda a,b:a+b)a,b)))

output:

[5, 7, 9]

* Write a Python program to update a specific column value of a given table and select all rows before and after updating the said table.
* Write a Python program to alter a given Mysql table.

Alter table Employee,

add name Varchar(50) Not Null;

* Write a Python program that takes a text file as input and returns the number of words of a given text filer

f= open('sample.txt','r')

count=0

for x in f:

s=x.split()

count +=s

print(count)

output:

15

* Write a Python program to calculate the value of 'a' to the power 'b'.(Using Recursion )

Test Data :

(power(3,4) -> 81

a=3

b=4

print(a\*\*b)

output:

81

* Write a Python program to generate 26 text files named A.txt, B.txt, and so on up to Z.txt.
* Write a Python program that accept name of given subject and marks. Input number of subjects in first line and subject name,marks separated by a space in next line. Print subject name and marks in order of its first occurrence.

Sample Output:

Powered by

Number of subjects: 3

Input Subject name and marks: Bengali 58

Input Subject name and marks: English 62

Input Subject name and marks: Math 68

Bengali 58

English 62

Math 68

sub=int(input('enter no.of subjects'))

for x in range(sub):

x=(input('enter subjectname and marks: '))

print(x)

output:

Number of subjects: 3

Input Subject name and marks: Bengali 58

Input Subject name and marks: English 62

Input Subject name and marks: Math 68

Bengali 58

English 62

Math 68

* Write a program that first displays a simple cafe menu (see example below), asks the

user to enter the number of a choice, and either prints the appropriate action OR prints an error message that their choice was not valid.

Example output:

1. Soup and salad

2. Pasta with meat sauce

3. Chef's special

Which number would you like to order? 2

One Pasta with meat sauce coming right up!

Another example output:

1. Soup and salad

2. Pasta with meat sauce

3. Chef's special

Which number would you like to order? 5

Sorry, that is not a valid choice.

a='Soup and salad'

b='Pasta with meat sauce'

c="Chef's special"

number=int(input('enter number:' ))

def func1(number):

if number==1:

return a

elif number==2:

return b

elif number ==3:

return c

else:

return 'Sorry, that is not a valid choice.'

print(func1(number))

output:

Which number would you like to order? 2

One Pasta with meat sauce coming right up!

* Write a program which accepts a sequence of comma-separated numbers from console and generate a list and a tuple which contains every number.

Suppose the following input is supplied to the program:

34,67,55,33,12,98

Then, the output should be:

['34', '67', '55', '33', '12', '98']

('34', '67', '55', '33', '12', '98')

a= input()

s = a.split(',')

print(s)

print(tuple(s))

output:

['34', '67', '55', '33', '12', '98']

('34', '67', '55', '33', '12', '98')

* Define a class which has at least two methods:

getString: to get a string from console input

printString: to print the string in upper case.

Also please include simple test function to test the class methods.