D1

* Integers:any number it might be positive or negative will be treated as integer

Eg:number=8

n1=-9

type(n1)

<class 'int'>

* any number with a decimal number it might be positive or negative will be treated as Float

type(value)

<class 'float>

Eg:float=-6.3

1.any thing between the quotes will be treated as strings('',"","')

* Asssigning single vaue to a single variable

fruit="apple"

* Assigning multiple values to single varaiable

V1=(1,2,3)

* Assigning multiple values to multiple varaiables

L1,L2,L3=5,6,7

* Assigning single values to multiple varaiables

g1=g2=g3=8 ..... it is nothing but tuple

############################

a=5

>>> float(a)

5.0

>>> v1="5.6"

>>> int(v1)

Traceback (most recent call last):

File "<pyshell#3>", line 1, in <module>

int(v1)

ValueError: invalid literal for int() with base 10: '5.6'

>>> float(v1)

5.6

>>> v2=float(v1)

>>> v2

5.6

>>> int(v2)

5

>>> print("janu")

janu

>>> name=input()

janu

>>> name=input("what is your name ?:")

what is your name ?:janu

>>> name

'janu'

>>> type(name)

<class 'str'>

>>> value=input("Enter some value : ")

Enter some value : 5.89

>>> type(value)

<class 'str'>

D2

l1=[1,2,3,4,5]

l1.append(6)

l1

[1, 2, 3, 4, 5, 6]

l1.insert(2,9)

l1

[1, 2, 9, 3, 4, 5, 6]

ll.clear()

Traceback (most recent call last):

File "<pyshell#5>", line 1, in <module>

ll.clear()

NameError: name 'll' is not defined. Did you mean: 'l1'?

l1.clear()

l1

[]

l1=[1,2,3,4,5]

l2=[6,7,8,9,10]

l1+l2

[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

>>> l1.extend(l1)

>>> l1

[1, 2, 3, 4, 5, 1, 2, 3, 4, 5]

>>> l1.extend(l2)

>>> l1

[1, 2, 3, 4, 5, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

>>> l2.extend(l1)

>>> l2

[6, 7, 8, 9, 10, 1, 2, 3, 4, 5, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

>>> l2.pop()

10

>>> l2

[6, 7, 8, 9, 10, 1, 2, 3, 4, 5, 1, 2, 3, 4, 5, 6, 7, 8, 9]

>>> l2[3]

9

>>> l2[9]=1

>>> l2

[6, 7, 8, 9, 10, 1, 2, 3, 4, 1, 1, 2, 3, 4, 5, 6, 7, 8, 9]

>>> l1[4]=8

>>> l2[4]=8

>>> l2

[6, 7, 8, 9, 8, 1, 2, 3, 4, 1, 1, 2, 3, 4, 5, 6, 7, 8, 9]

>>> l1.sort()

>>> l1

[1, 1, 2, 2, 3, 3, 4, 4, 5, 6, 7, 8, 8, 9, 10]

>>> l1.reverse()

>>> l1

[10, 9, 8, 8, 7, 6, 5, 4, 4, 3, 3, 2, 2, 1, 1]

>>> l1.sort(reverse=True)

>>> l1

[10, 9, 8, 8, 7, 6, 5, 4, 4, 3, 3, 2, 2, 1, 1]

>>> l2=l1

>>> l1

[10, 9, 8, 8, 7, 6, 5, 4, 4, 3, 3, 2, 2, 1, 1]

>>> l2

[10, 9, 8, 8, 7, 6, 5, 4, 4, 3, 3, 2, 2, 1, 1]

>>> l3=l1.copy()

>>> l3

[10, 9, 8, 8, 7, 6, 5, 4, 4, 3, 3, 2, 2, 1, 1]

>>> l1.count(8)

2

D3

num=123456789

print(int(str(num)[::-1]))

987654321

type(num)

<class 'int'>

a=('python','saketh',25,'codegnan',36,'mentor',[1,4,5],26)

a[1:8:2]

('saketh', 'codegnan', 'mentor', 26)

a='ppy!'

SyntaxError: unexpected indent

a='ppy!'

print(a[0]+'a'+a[1]+'a'+a[3])

papa!

print(a[0]+'a'+a[1]+'a'+a[2]+'a'+a[3])

papaya!

'a'.join(a)

'papaya!'

a=["I","work","i","code"]

b=["am","ing","n","gnan"]

c=a[0]+" "+b[0]+" "+a[1]+b[1]+" "+a[2]+b[2]+" "+a[3]+a[3]

c

'I am working in codecode'

c=a[0]+" "+b[0]+" "+a[1]+b[1]+" "+a[2]+b[2]+" "+a[3]+b[3]

c

'I am working in codegnan'

p=['a','b',['c',['d','e',['f', 'g'], 'k'], 'l'], 'm','n']

p

['a', 'b', ['c', ['d', 'e', ['f', 'g'], 'k'], 'l'], 'm', 'n']

p[2]

['c', ['d', 'e', ['f', 'g'], 'k'], 'l']

p[2][1]

['d', 'e', ['f', 'g'], 'k']

p[2][1][1]

'e'

p[2][1][2]

['f', 'g']

p[2][1][2]=['f','g','h','i']

p[2][1][2]

['f', 'g', 'h', 'i']

p

['a', 'b', ['c', ['d', 'e', ['f', 'g', 'h', 'i'], 'k'], 'l'], 'm', 'n']

m='Ivis'

n='code'

m[0]+n[-1]+m[1]+n[-2]+m[2]+n[-3]+m[3]+n[-4]

'Ievdiosc'

k='I work in codegnan and codegnan is in vijayawada and love codegnan'

k.count()

Traceback (most recent call last):

File "<pyshell#30>", line 1, in <module>

k.count()

TypeError: count() takes at least 1 argument (0 given)

k.count('codegnan')

3

k='I work in Codegnan and codegnan is in vijayawada and love codegnan'

k.count('codegnan')

cv //./// 2

k.lower()

'i work in codegnan and codegnan is in vijayawada and love codegnan'

k.count('codegnan')

2

m='I work in Codegnan and codegnan is in vijayawada and love codegnan'

m.count('codegnan')

2

m.lower()

'i work in codegnan and codegnan is in vijayawada and love codegnan'

m.count('codegnan')

2

f=m.lower()

f.count('codegnan')

3

g="saketh-is-a-python-mentor"

b=a.split('-')

Traceback (most recent call last):

File "<pyshell#45>", line 1, in <module>

b=a.split('-')

AttributeError: 'list' object has no attribute 'split'

>>> b=g.split('-')

>>> b

['saketh', 'is', 'a', 'python', 'mentor']

>>> w="python learning am I"

>>> b=w.split(' ')

>>> b

['python', 'learning', 'am', 'I']

>>> b=w[-1]+w[-2]+w[-3]+w[-4]

>>> b

'I ma'

>>> b=b[-1]+b[-2]+b[-3]+b[-4]

>>> b

'am I'

>>> w="python learning am I"

>>> b2=w.split(' ')

>>> c=b2[-1]+' '+b2[-2]+' '+b2[-3]+' '+b2[-4]

>>> c

'I am learning python'

>>> a='silent'

>>> a=[-4:-6]

SyntaxError: invalid syntax

>>> a[-4:-6]

''

>>> a

'silent'

>>> a[-5:-1]

'ilen'

>>> -a[-5:]

Traceback (most recent call last):

File "<pyshell#64>", line 1, in <module>

-a[-5:]

TypeError: bad operand type for unary -: 'str'

>>> a[-5:]

'ilent'

>>> a[-5:0]

''

>>> a

'silent'

D4

import time

num=[1,2,3,4,5,6,7,8]

for i in num:

if i % 3 == 0:

print(i)

#time.sleep(2)

########################

year=int(input("Enter year to be checked:"))

if(year%4==0 and year%100!=0 or year%400==0):

print("The year is a leap year!")

else:

print("The year isn't a leap year!")

###########################3

Fahrenheit= 54

Celsius = ((Fahrenheit-32)\*5)/9

print("Temperature in Celsius is: ");

print(Celsius);

D5

#odd numbers

'''''

sum=0

i=1

while i<21 :

if(i%2 != 0) :

sum = sum + (i\*\*2)

i= i+1

print(sum)

'''''''

#odd numbers using for loop

sum=0

for i in range(1,21):

if(i%2 != 0) :

sum = sum + (i\*\*2)

i= i+1

print(sum)

''''''

#sentences

n= 0

n1= 0

a= input("Enter a sentences: ")

for i in a:

if a.isalpha():

n = n+ 1

elif a.isdigit():

n1= n112

13+ 1

print('characters:',n)

print('digits:',n1)

''''''

#another function

a=5

b=6

c=a+b

print(c)

''''''

#functions

def addition():

a=5

b=6

c=a+b

print(c)

addition()

''''''

#without declaring

''''''

def addition(a,b):

c=a+b

print(c)

addition(5,6)

addition(6,7)

adition(8,6)

'''

#dynamic

def addition():

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

b= int(input("Enter value: "))

c=a+b

print(c)

addition()

D6

#multiplication

'''

n=int(input("enter num"))

for i in range(1,11):

print(n,'x',i,'=',n\*i)

''''''

#positional arguments

(a,b)=(5,6)

''

#default argument

(a,b=5)=(8)

''''''

#default arguments

def addition (a,b=8):

c=a+b

print(c)

addition(5,6)

addition(7)

''''''

#keyword argument

def addition(a,b):

print("value of a: ",a)

print("value of b: ",b)

c=a+b

print(c)

#addition(5,6)

addition (b=5,a=6)

''''''

#variable lenth argument

def addition(a,\*b):

print("value in b:",b)

d=sum(b)

c=a+d

print("total sum of d is :",d)

c=a+d

print(d)

addition(5,6,7,8,9,4)

'''

#keyword length arguments

def addition(\*\*kwargs):

for key,value in kwargs.items():

print("%s ==%s" %(key,value))

addition(name="sai",number="52",city="vijayawada")

D7

''''

import random

player1=input('enter rock/paper/scissor;')

cpu=random.choice(['rock','paper','scissor'])

print(cpu)

if player1==cpu:

print("it s a draw")

elif player1=='rock':

if cpu=='scissor':

print('player1 rocks cpu shocks')

else:

print('cpu rocks player1 shocks')

elif player1=='paper':

if cpu=='rock':

print('player1 rocks cpu shocks')

else:

print('cpu rocks player1 shocks')

elif player1=='scissor':

if cpu=='paper':

print('player1 rocks cpu shocks')

else:

print('cpu rocks player1 shocks')

else:

print('There is a type error in response entered tried again')

''''''

#example for mail code

import smtplib

import random

#from smtplib import SMTP

recpt=input('enter to mail')

otp=random.randint(12422,999999)

server=smtplib.SMTP('smtp.gmail.com',587)

server.starttls()

server.login('jahnavipasupuleti1302@gmail.com','fxuribaetdwmodge')

server.sendmail('jahnavipasupuleti1302@gmail.com',

recpt,

'The otp is-'+str(otp))

server.close()

print('mail sent')

otp2=int(input('enter otp'))

if otp==otp2:

print('The otp is valid')

else:

print('invalid otp -check your eye right')

'''

#another example

import time

import random

for i in range(2):

otp=random.randrange(123456,999999)

print(otp)

time.sleep(10)

D8

#add two numbers

'''

def add(a,b):

if a>b:

return 'ais big'

else:

return 'b is big'

add(2,3)

''''''

#lamda

h=lambda a,b:a+b

square = lamda a:a\*\*2

cube=lamda a:a\*\*3

d=lamda lst:max(lst)

h(1,2,4,5)

''''''

#string to list

k=input('enter numbers with spaces')

print(k.split())

l=[]

for i in k.split():

l.append(int(i))

print(l,b-a)

'''''''

def square(a):

return a\*\*a

st=[2,9,8,7]

lst2=[]

for i in lst:

lst2.append(square(i))

print(lst2)

k=tuple(map(int,input('enterb number with spaces').split()))

print(k)

#another method list using map

lst=list(map(int,input('enter number with spaces').split()))

new\_lst=list(map(square,lst))

print(new\_lst)

''''''

k=list(map(int,input('enter numbers with sp').split()))

new\_list=list(filter(lambda x:x%2==0,k))

print(new\_list)

''''''''

h=lambda a,b:a+b

h(1,2)

3

square = lambda a:a\*\*2

square(78)

6084

cube=lambda a:a\*\*3

cube(3)

27

max(8,0,-1)

8

min(23,0,7,-1)

-1n

''''

string='i am {0} doing {1} at {2}'.format('eswar','p fs','codegnan')

string

name='manu'

org='codegnan'

ins='python full stack'

h=f'i am {name} doing {ins} at {org}'

h

Insta code

#Getting duplicate data from instagram -->instaloader

#from command prompt we can give directly

#instaloader<profile\_name>

import instaloader

mod = instaloader.Instaloader()

print(mod)

#based on above project we work on different usecases

profile\_name = input("Enter the Profile Name")

print(profile\_name)

#mod.download\_profile(profile\_name)

#starts giving all posts

mod.download\_profile(profile\_name,profile\_pic\_only=True)

D9