1.

def maxf(x):

maxv=x[0]

for i in x:

if i>maxv:

maxv=i

minv=x[0]

for i in x:

if i<minv:

minv=i

return(maxv,minv)

tup = (1,2,3,4,4,5,55,4,7)

mx,mn=maxf(tup)

print(mx,mn)

Output:

55 1

2.

def cubef(a):

area=6\*(a\*a)

vol=a\*a\*a

return print(f"Volume={vol} & area={area}")

cubef(2)

Output:

Volume=8 & area=24

3.

books=(('Panchatantra','Vishnu Sharma',350),

('Mahabharat','Vyasa',150),

('Ramayan','Valmiki',250))

while(True):

bname=str(input("Enter Book Name : "))

if(bname!='exit'):

for i in books:

if(i[0]==bname):

print(f"BookName : {i[0]} // Author : {i[1]} // Price : {i[2]} ")

else:

break

Output

Enter Book Name : Panchatantra

BookName : Panchatantra // Author : Vishnu Sharma // Price : 350

4.

username = []

domain = []

for i in range(5):

email=str(input(f"Enter Email No.{i}: "))

usr,dom=email.split('@')

username.append(usr)

domain.append(dom)

print("Usernames : ",tuple(username))

print("Domains : ",tuple(domain))

Output:

Enter Email No.0: abc@xyz.com

Enter Email No.1: 123@456.com

Enter Email No.2: admin@google.com

Enter Email No.3: staff@hospital.com

Enter Email No.4: mouse@keyboard.com

Usernames : ('abc', '123', 'admin', 'staff', 'mouse')

Domains : ('xyz.com', '456.com', 'google.com', 'hospital.com', 'keyboard.com')

6.

country = ('India','America','Mexico','Bangladesh')

capital = ('Delhi NCR','Washington DC','Mexico City','Dhaka')

zipped = tuple(zip(country,capital))

print(zipped)

Output:

(('India', 'Delhi NCR'), ('America', 'Washington DC'), ('Mexico', 'Mexico City'), ('Bangladesh', 'Dhaka'))

7.

animals=(("Dog",'land','bark','guard house'),

('Cat','land','meow','litter'),

('Cow','land','moo','grass eating'),

('Whale','water','whistle','swim'),

('Bird','air','chirp','fly'))

while(True):

live=str(input("Enter where the Animals lives (land,water,air) : "))

if(live!='exit'):

sound=str(input("Enter animal sound : "))

activity=str(i nput("Enter Animal activity : "))

for i in animals:

if(i[1]==live and i[2]==sound and i[3]==activity):

print(f"\nYour Animal is : {i[0]}")

else:

break

Output:

Enter where the Animals lives (land,water,air) : air

Enter animal sound : chirp

Enter Animal activity : fly

Your Animal is : Bird