print("welcome to python programming")

welcome to python programming

a="hello welcome to python"

b=1234

c=6.5

print(a,b,c)

hello welcome to python 1234 6.5

#type conversion

a=30

b=5+6j

c=10.6

print(int(c), float(a), str(b))

Output:-10 30.0 (5+6j)

#list

A=['Nandish', 'Harshitha', 'Prathyusha', 'Niharika']

#print(A)

#A.insert(4, 'Keerthana')

#A.remove('Keerthana')

#print(A)

#A.index('Harshitha')

#del A[0]

#print(A)

#A.count('Harshitha')

#A.pop(3)

#A.reverse()

#A.sort(reverse=True)

#sorted(A, reverse=True)

#A.clear()

#A.sort()

print(A)

output:- ['Nandish', 'Harshitha', 'Prathyusha', 'Niharika']

#tuple

B=('sahil', 'sai', 'Nandish', 'Harshitha', 'Manjula', 'Deepika','Archana','Likitha')

print(B)

B=B\*3

print(B)

print(B[0:5])

output:-('sahil', 'sai', 'Nandish', 'Harshitha', 'Manjula', 'Deepika', 'Archana', 'Likitha')

('sahil', 'sai', 'Nandish', 'Harshitha', 'Manjula', 'Deepika', 'Archana', 'Likitha', 'sahil', 'sai', 'Nandish', 'Harshitha', 'Manjula', 'Deepika', 'Archana', 'Likitha', 'sahil', 'sai', 'Nandish', 'Harshitha', 'Manjula', 'Deepika', 'Archana', 'Likitha')

('sahil', 'sai', 'Nandish', 'Harshitha', 'Manjula')

#Dictionary

Cars = {'Name' : ["BMW", "Maruthi", "Audi", "Hundai", "KIA"],

        'Model' :['9870', '1917', '1698', '2021', '2000'],

        'Color' :['Black', 'Red', 'Blue', 'White', 'Grey']}

print(Cars)

print(Cars.keys())

print(Cars.values())

Cars['Location']=['Hyderabad', 'Bengaluru', 'Chennai', 'Mumbai', 'Delhi']

print(Cars)

Cars['Model'][2]='N29'

print(Cars)

del Cars['Model']

print(Cars)

print(len(Cars))

print(Cars.clear())

output:- {'Name': ['BMW', 'Maruthi', 'Audi', 'Hundai', 'KIA'], 'Model': ['9870', '1917', '1698', '2021', '2000'], 'Color': ['Black', 'Red', 'Blue', 'White', 'Grey']}

dict\_keys(['Name', 'Model', 'Color'])

dict\_values([['BMW', 'Maruthi', 'Audi', 'Hundai', 'KIA'], ['9870', '1917', '1698', '2021', '2000'], ['Black', 'Red', 'Blue', 'White', 'Grey']])

{'Name': ['BMW', 'Maruthi', 'Audi', 'Hundai', 'KIA'], 'Model': ['9870', '1917', '1698', '2021', '2000'], 'Color': ['Black', 'Red', 'Blue', 'White', 'Grey'], 'Location': ['Hyderabad', 'Bengaluru', 'Chennai', 'Mumbai', 'Delhi']}

{'Name': ['BMW', 'Maruthi', 'Audi', 'Hundai', 'KIA'], 'Model': ['9870', '1917', 'N29', '2021', '2000'], 'Color': ['Black', 'Red', 'Blue', 'White', 'Grey'], 'Location': ['Hyderabad', 'Bengaluru', 'Chennai', 'Mumbai', 'Delhi']}

{'Name': ['BMW', 'Maruthi', 'Audi', 'Hundai', 'KIA'], 'Color': ['Black', 'Red', 'Blue', 'White', 'Grey'], 'Location': ['Hyderabad', 'Bengaluru', 'Chennai', 'Mumbai', 'Delhi']}

3

None

#Dictionary

Cars = {'Name' : ["BMW", "Maruthi"],

         'Model' :['9870', '1917', '1698', '2021', '2000'],

        'Color' :['Black', 'Red', 'Blue', 'White', 'Grey']}

print(Cars)

output:- {'Name': ['BMW', 'Maruthi'], 'Model': ['9870', '1917', '1698', '2021', '2000'], 'Color': ['Black', 'Red', 'Blue', 'White', 'Grey']}

#String

str='Welcome to Google colab'

print(str)

print(len(str))

print(str.index('o'))

print(str.count('l'))

print(str.lower())

print(str.upper())

print(str.split())

print(str.replace('',','))

print(str.capitalize())

output:- Welcome to Google colab

23

4

3

welcome to google colab

WELCOME TO GOOGLE COLAB

['Welcome', 'to', 'Google', 'colab']

,W,e,l,c,o,m,e, ,t,o, ,G,o,o,g,l,e, ,c,o,l,a,b,

Welcome to google colab

#sets

x={1,3,5,7,9,11,13,15,3,1,7}

y={2,4,5,13,10,3,11}

print(x,y)

print(x|y)#union

print(x&y)#intersection

print(x-y)#difference

print(x^y)#symmetry

output:- {1, 3, 5, 7, 9, 11, 13, 15} {2, 3, 4, 5, 10, 11, 13}

{1, 2, 3, 4, 5, 7, 9, 10, 11, 13, 15}

{11, 13, 3, 5}

{1, 15, 9, 7}

{1, 2, 4, 7, 9, 10, 15}

#Splicing

s="Nevergiveup"

print(s)

print(s[1:7])

print(s[1:])

print(s[:-6])

print(s[1:-1])

print(s[0:100])

print(s[0:9])

print(s[0:5:6])

print(s\*3)

print(len(s))

output:- Nevergiveup

evergi

evergiveup

Never

evergiveu

Nevergiveup

Nevergive

N

NevergiveupNevergiveupNevergiveup

11

#Arithmetic operator

x=115

y=50

print(x+y,x-y,x\*y, x/y, x%y, x\*\*y, x//y)

output:- 165 65 5750 2.3 15 10836574415839575904251567183779582412043126269965673866060864169402666590258377254940569400787353515625 2

#comparision operator

x=55

y=26

if x==y:

  print("x is eqaul to y")

if x<y:

  print("x is less than y")

if x>y:

  print("x is greater than y")

if x>=y:

  print("x is greater than or equal to y")

if x<=y:

  print("x is less than or equal to y")

output:- x is greater than y

x is greater than or equal to y

#logical operator

x=True

y=False

print(x and y, x or y, not x)

output:- False True False

#identity operator

x=33

y=22

if x is y:

  print("It is similar")

else:

  print("It is not similar")

output:- It is not similar

#membership operator

x=[10,20,30,40,50,60,70,80]

if 1000 in x:

  print('present')

else:

  print('Absent')

output:- Absent

str="training"

for i in str:

  print (i)

output:- t

r

a

i

n

i

n

g

for letter in [10,20,30,40]:

  print(letter)

output:- 10

20

30

40

count=1

while count<=10:

  print(count)

  count=count+1

print("Good boy")

output:- 1

2

3

4

5

6

7

8

9

10

Good boy

marks=int(input("enter your marks in Mathematics"))

if marks>=35:

  print("congratulations you are passed")

else:

  print("sorry you got failed so betterluck next time")

print("Thank you")

output:- enter your marks in Mathematics60

congratulations you are passed

Thank you

marks=int(input("enter your marks in Mathematics"))

if marks==100:

  print("perfect score")

print("thank you")

output:- enter your marks in Mathematics100

perfect score

thank you

name="Harshitha"

college="Donbosco"

marks=70

if college=="Donbosco":

  if name=="Harshitha":

    print("Harshitha of Donbosco college got:",marks,"marks")

output:- Harshitha of Donbosco college got: 70 marks

a=int(input("Enter a value"))

b=int(input("Enter b value"))

c=int(input("Enter c value"))

if a>b and a>c:

  print ("a is maximum")

elif b>a and b>c:

  print("b is maximum")

else:

  print("c is maximum")

output:- Enter a value7

Enter b value9

Enter c value3

b is maximum

count=0

while count<=10:

  if count==6:

    break

  else:

    print (count)

  count=count+1

print("thank you")

output:- 0

1

2

3

4

5

thank you

for letter in "Pravalika":

  if letter=='a':

    break

  else:

    print(letter)

print("thank you")

output:- P

r

thank you

for i in range(100):

  if i==9:

    break

  else:

    print(i)

print("Good job")

output:- 0

1

2

3

4

5

6

7

8

Good job

values=input("input some comma seperated numbers:")

list = values.split(",")

tuple = tuple(list)

print('list:',list)

print('tuple:',tuple)

output:- values=input("input some comma seperated numbers:")

list = values.split(",")

tuple = tuple(list)

print('list:',list)

print('tuple:',tuple)

values=input("input some comma seperated numbers:")

list = values.split(",")

tuple = tuple(list)

print('list:',list)

print('tuple:',tuple)

fname=input("enter your first name: ")

lname=input("enter your last name:")

print("hello " + fname + " " + lname)

output:- enter your first name: asasa

enter your last name:wwqwq

hello asasa wwqwq

import calendar

x = int(input("input the year :"))

y = int(input("input the month:"))

print(calendar.month(x,y))

output:- input the year :2010

input the month:04

April 2010

Mo Tu We Th Fr Sa Su

1 2 3 4

5 6 7 8 9 10 11

12 13 14 15 16 17 18

19 20 21 22 23 24 25

26 27 28 29 30

number=10

print("binary number of 1001 is :", bin(number))

output:- binary number of 1001 is : 0b1010

#Simple Calculator

def add(x,y):

  return x+y

def substract(x,y):

  return x-y

def multiply(x,y):

  return x\*y

def divide(x,y):

  return x/y

print("select the operation")

print("1.add")

print("2.substraction")

print("3.multiply")

print("4.divide")

choice = input("Enter the choice(1/2/3/4):")

num1 = float(input("Enter first number:"))

num2 = float(input("Enter second number:"))

if choice == '1':

  print(num1,"+", num2, "=", add(num1, num2))

elif choice == '2':

  print(num1,"-", num2, "=", substract(num1, num2))

elif choice == '3':

  print(num1,"\*", num2, "=", multiply(num1, num2))

elif choice == '4':

  print(num1,"/", num2, "=", divide(num1, num2))

else:

  print("invalid Input")

output:- select the operation

1.add

2.substraction

3.multiply

4.divide

Enter the choice(1/2/3/4):2

Enter first number:50

Enter second number:90

50.0 - 90.0 = -40.0