import keyword

print(f"print Keywords in Python are {keyword.kwlist}")

#Count number of keywords present in List

count=0

for i in keyword.kwlist:

count=count+1

print(f"Total No of Keywords in Python is {count}.")

#True represents boolean truei.e Value 1#False represents boolean Falsei.e Value 0

#None does not mean False,empty string,list,tupple,set or dictionary or NULL.

#None is an object of class Nonetype

#Python does Not support Null so we have None.None means nothing.

print(True == 1)

print(False == 0)

print(None == [])

print(None =={})

print(None == ())

print(None == None)

print(type(None))

var = None

if var == None:

print("None")

else:

print("Not None")

print('For Loop example')

#range(5,10)-----5,6,7,8,9

i=0

for i in range(11):

print(i)

print('While Loop in Python')

i=0

while(i<10):

print(i,end=" ")

i=i+1

print('Break statement in Python')

i=0

for i in range(1,11):

if i == 6:

break

else:

print(i)

print("Continue statement in Python")

i=0

while(i<=10):

if i == 7:

i=i+1

continue

else:

print(i)

i=i+1

#if-else-statement-------else part is always optional

print("if-elif-else statement in Python")

x=20

if x == 20:

print('x is 20')

else:

print('x is not 20')

z=10

y=0

if (y == 10):

print('y is 10')

elif (y != 10):

print('y is not 10')

else:

print('y is not present')

#shorthand if statemnt

i=9

print('i is greater than 10')if i > 10 else print('i is smaller than 10')

print('Nested if statement')

i=13

if (i == 13):

print('i is equal to 13')

if(i<10):

print('i is less than 10')

if(i>15):

print('i is greater than 15')

else:

print('is in between 10 and 15')

else:

print('i is not equal to 13')

#and or not in is keyword in Python.

print(3 and 10)

print(3 and 0)

print(0 and 5)

print(0 and 5 and 10 and 15 and 0)

print(10 and 12 and 15 and 7 and 17)

print(1 or 0)

print(0 or 11)

print(0 or 0 or 0 or 8 or 7)

#and or on Boolean Operations

'''

print(True and False)

print(False and True)

print(True and True)

print(False and False)

print(not True)

print(not False)

print(not 15)

print(not 0)

print(not 11)

'''

#in keyword is to check if it is contained in the container or to loop through the container.

print('In keyword')

x="Gurnani Hiren"

y='H'

if y in x:

print(f"{y}'is present in {x}")

#in keyword is case sensitive.

x="Gurnani Hiren"

y="hiren"

if y in x:

print(f"{y}'is present in {x}")

else:

print(f"{y}'is not present in {x}")

for i in "Gurnani Hiren":

print(i,end="\n")

print('def keyword in Python')

def add(x1,x2):

x=x1+x2

print(x)

def sub(x1,x2):

x=x1-x2

print(x)

def mul(x1,x2):

x=x1\*x2

print(x)

def div(x1,x2):

x=x1/x2

print(x)

#n1=int(input('Enter a value n1'))

#n2=int(input('Enter a value n2'))

n1=12

n2=10

add(n1,n2)

sub(n1,n2)

mul(n1,n2)

div(n1,n2)

print('is Keyword in Python')

print('' is '')

print({} is {})

print('Return Keyword in Python')

def add1(n1,n2):

x=n1+n2

return x

y=add1(5,5)

print(type(y))

print(y)

print('If we do not return a value from a function type becomes of None Type')

def add2(n1,n2):

x=n1+n2

#return x

y=add2(5,5)

print(type(y))

print(y)

print('Returning Multiple values in form of list from a function')

def fun1():

str="Hiren"

n=790

return [str,n]

x=fun1()

print(type(x))

print(x)

print('Returning Multiple values in form of tuple from a function')

def func2():

str="Hiren"

n=790

return (str,n)

x=func2()

print(type(x))

print(x)

print('Returning Multiple values in form of sets from a function')

def func3():

str="Hiren"

n=790

return {str,n}

x=func3()

print(type(x))

print(x)

print('Returning Multiple values in form of Dictionary from a function')

def func4():

x=dict()

x["st"]="GeeksforGeeks"

x[1]=10

return x

x=func4()

print(type(x))

print(x)

print('Main Function in Python')

def main():

print("Inside Main Function")

print("Hello World")

if \_\_name\_\_=="\_\_main\_\_":

print('calling main Function')

main()

else:

print('Their is no Function defined as main')

print('Yeild Keyword in Python')

def func5():

x=0

for i in range(15):

x=x+i

yield x

x=func5()

for i in x:

print(i)

print("Another Example of Yield")

def func6():

h=0

for i in range(21):

if(i % 2 == 0):

yield i

x=func6()

for i in x:

print(i)

print('A simple class example in Python')

class Company:

comp1="Dell"

comp2="hp"

comp3="apple"

def fun(self):

print(f"comp1 is {self.comp1}")

print(f"comp2 is {self.comp2}")

print(f"comp3 is {self.comp3}")

z=Company() #Object instantiazation of class to an Object.

m=z

print(f"{z.comp1}")

print(f"{z.comp2}")

print(f"{z.comp3}")

z.fun()

print(f"{m.comp1}")

print(f"{m.comp2}")

print(f"{m.comp3}")

m.fun()

print('as and import Keyword in Python')

import math as mathematics

print(mathematics.factorial(5))

from math import factorial

print(factorial(6))

print('Pass Keyword')

print('It is a null statement and is used if we want to add code later and does nothing')

for i in range(11):

pass

x=[1,2,3,4,5] #List is Mutable so we can delete its element.

del x[0]

print(x)

del x[3]

print(x)

string\_1="Hiren"#String is not Mutable so we cannot delete its element but we can delete whole string.

#del(string[0])

del(string\_1)

print(string\_1)