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DATA TYPES IN PYTHON

In [2]: # STRING

Name = "APPLE"
print(Name)

# something inside a "" is string

Name_2 = "Apple123"
print(Name_2)

APPLE
Apple123

In [3]: # Numerical Datatypes ( int , float , complex )
# int

Number_1 = int(10)
print(Number_1)

10

In [4]: # float

float = (20.5)
print(float)

20.5

In [7]: # cheking the type

print(type(Number_1))
print(type(float))

<class 'int'>
<class 'float'>

In [12]: # Sequence Types:      list, tuple

# LIST STORES DIFFRENT DATATYPES CONTAINS ONE OR MORE ELEMENT

# List is MUTABLE - Values can be changed

List = ["Apple",10,10.2,"hi"]
#index=[0,1,2]
print(List)

['Apple', 10, 10.2, 'hi']

In [13]: # List of List starts from 0

print(List[0])

Apple

In [10]: print(List[1])

10

In [11]: print(List[2])

10.2

In [15]: # TUPLES

# Tuples IMMUTABLE data types

In [16]: Tuples = ("hi",10,10.2)
print(Tuples)

('hi', 10, 10.2)

In [17]: # COMPARISON OPERATORS

# ==
# !=
# >
# <
# >=
# <=

In [19]: Number_3 = 10
Number_4 = 20

print(Number_3 == Number_4)
print(Number_3 < Number_4)

False
True

In [20]: # LOGICAL OPERATORS

# and = both the statement should be True then answer will be true
# or = either one condition should be true
# not = opposite values

In [23]: # and

Apple = "Fruit"
Orange = "Fruit"

print(Apple and Orange == "Fruit")

False

In [24]: # or

Apple = "Fruit"
Orange = "wood"

print(Apple or Orange == "Fruit")

Fruit

In [27]: # Not

# true = flase
# false = true

print(not(True))
print(not(False))

False
True

In [28]: # INPUT AND OUTPUT

# input function

In [41]: First_name = input(" Enter First name ")
Last_name = input("Enter Last name ")

Age = int(input("enter the Age"))

print(First_name)
print(type(First_name))
print(Last_name)
print(type(Last_name))
print(Age)
print(type(Age))

hi
<class 'str'>
bye
<class 'str'>
20
<class 'int'>

CONTROL STATEMENT

In [42]: # While Loop

# the loop is run when the condition changes to false.
# print "hii" 3 times
count = 0
while (count < 3):
    count = count+1
    print("Hii")

Hii
Hii
Hii

In [47]: # For Loop

# for i in range = do something nth times

for i in range(7):
    print("hi")

hi
hi
hi
hi
hi
hi
hi

In [52]: List_5 = [1,2,3,4,5]

for i in List_5:
    print(i)

1
2
3
4
5

In [53]: List_6 = ["a","b","c"]

for i in List_6:
    print(i)

a
b
c

In [54]: # IF ELSE LOOP

In [59]: Name = "hii"
# == IT WILL CHECK BOTH VALUE AND DATA TYPE
if Name == "Apple":
    print("Correct")
else:
    print("not correct")

not correct

In [75]: # Dictionaries
# working = KEY VALUE PAIRS

Phone_Book = {
    "Name_1" : " PYTHON ",
    "Name_2" : " c ",
    "Mani" : 743214777
    #KEY      # Value
}
print(Phone_Book)

#Indexing
print(Phone_Book["Name_1"])
print(Phone_Book["Name_2"])
print(Phone_Book["Mani"])

{'Name_1': ' PYTHON ', 'Name_2': ' c ', 'Mani': 743214777}
PYTHON
c
743214777
```

