Data types

Data types are nothing but some of the key words of programming languages, which are used to specify what type of data has to store into the variables.

Python supports dynamic data types. That is the data type of the variable will be decided at runtime based on the data which is assigned to that variable.

Python supports following types of data types internally

1.numeric types

2.boolean

3.string

4.list

5.tuple

6.dictionary

7.set

1. numeric types

Numeric data types store numeric values. Numeric objects are created when you assign a value to them.

Python supports following numeric types

1. Int
2. Long
3. float
4. complex

eg1:

i=123

print i #123

print type(i) #int

print id(i) #123459(address)

eg2:

j=123L

print j #123

print type(j) #long

print id(j) #123499(address)

eg3:

k=123.123

print k #123.123

print type(k) #float

print id(k) #122499(address)

eg4:

x=2.3j

print x#2.3j

print type(x) #complex

print id(x) #123479(address)

2. Boolean

Boolean data type is used to represent true/false values

P=True

Print p # True

Print type(p) # bool

Print id(p) # 45678

3. string

String data type is used to represent group of characters or alphanumeric characters.

Strings we can represent into two ways

1.single quotes

2.triple quotes

1. singel quoted string

Single quoted string is used to represent single line string.

Eg1:

X=’sathya’

print x # sathya

print type(x) # str

print id(x) # 1256789

(or)

Y=”sathya”

Print y; # sathya

print type(y) # str

print id(y) # 1296789

eg2:

z=”welcome

error

z=”welcome to \

sathya \

technologies \

“

Print z # welcome to sathya technologies

(or)

z=”welcome to \n \

sathya \n \

technologies \n \

“

Print z # welcome to

Sathya

technologies

2. triplel quoted string

Triple quoted string is used to represent multile line string.

Eg1:

X=’’’sathya’’’

print x # sathya

print type(x) # str

print id(x) # 13456789

(or)

Y=”””sathya”””

Print y; # sathya

print type(y) # str

print id(y) # 1296789

eg2:

z=”””welcome to

sathya

technologies

“””

Print z # welcome to

Sathya

technologies