

BUILT-IN DATA TYPES IN PYTHON

(2022BIT018)

numeric

```
anushka-patil@anushka-patil-1-0: ~  
anushka-patil@anushka-patil-1-0:~$ python3  
Python 3.11.6 (main, Apr 10 2024, 17:26:07) [GCC 13.2.0] on linux  
Type "help", "copyright", "credits" or "license" for more information.  
>>> a=6  
>>> type(a)  
<class 'int'>  
>>> b=2.345  
>>> type(b)  
<class 'float'>  
>>> c=2+3i  
File "<stdin>", line 1  
    c=2+3i  
      ^  
SyntaxError: invalid decimal literal  
>>> c=2 + 3j  
>>> type(c)  
<class 'complex'>  
>>> quit  
Use quit() or Ctrl-D (i.e. EOF) to exit  
>>> quit()  
anushka-patil@anushka-patil-1-0:~$
```

sequence

1) string

```
anushka-patil@anushka-patil-1-0: ~  
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Python 3.11.6 (main, Apr 10 2024, 17:26:07) [GCC 13.2.0] on linux  
Type "help", "copyright", "credits" or "license" for more information.  
>>> string = "anushka"  
>>> string  
'anushka'  
>>> string[1]  
'n'  
>>> string[0]  
'a'  
>>> string[-1]  
'a'  
>>> string[-2]  
'k'  
>>> str="hello"  
>>> str  
'hello'  
>>> quit()  
anushka-patil@anushka-patil-1-0:~$
```

2)list

```
anushka-patil@anushka-patil-1-0: ~  
anushka-patil@anushka-patil-1-0:~$ python3  
Python 3.11.6 (main, Apr 10 2024, 17:26:07) [GCC 13.2.0] on linux  
Type "help", "copyright", "credits" or "license" for more information.  
>>> list=["myself","anushka"]  
>>> list[]  
File "<stdin>", line 1  
    list[]  
      ^  
SyntaxError: invalid syntax  
>>> list  
['myself', 'anushka']  
>>> list[6]  
Traceback (most recent call last):  
  File "<stdin>", line 1, in <module>  
IndexError: list index out of range  
>>> list[-1]  
'anushka'  
>>> list[0]  
'myself'  
>>> list[1]  
'anushka'  
>>> l=[hello]  
Traceback (most recent call last):  
  File "<stdin>", line 1, in <module>  
NameError: name 'hello' is not defined. Did you mean: 'help'?  
>>> l=["hello"]  
>>> l[3]  
Traceback (most recent call last):  
  File "<stdin>", line 1, in <module>  
IndexError: list index out of range  
>>> l[0]  
'hello'  
>>> l[-1]  
'hello'  
>>> quit()  
anushka-patil@anushka-patil-1-0:~$
```

3)tuple

```
anushka-patil@anushka-patil-1-0: ~  
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Python 3.11.6 (main, Apr 10 2024, 17:26:07) [GCC 13.2.0] on linux  
Type "help", "copyright", "credits" or "license" for more information.  
>>> tuple=('hey','anu')  
>>> tuple  
('hey', 'anu')  
>>> tuple1=(1,3)  
>>> list=[1,2]  
>>> tuple1  
(1, 3)  
>>> tuple1[0]  
1  
>>> quit()  
anushka-patil@anushka-patil-1-0:~$
```

3)boolean

```
anushka-patil@anushka-patil-1-0: ~  
anushka-patil@anushka-patil-1-0:~$ python3  
Python 3.11.6 (main, Apr 10 2024, 17:26:07) [GCC 13.2.0] on linux  
Type "help", "copyright", "credits" or "license" for more information.  
>>> type(True)  
<class 'bool'>  
>>> type(False)  
<class 'bool'>  
>>> a=True  
>>> type(a)  
<class 'bool'>  
>>> type(true)  
Traceback (most recent call last):  
  File "<stdin>", line 1, in <module>  
NameError: name 'true' is not defined. Did you mean: 'True'?  
>>> quit()  
anushka-patil@anushka-patil-1-0:~$
```

4)set

```
anushka-patil@anushka-patil-1-0: ~  
anushka-patil@anushka-patil-1-0:~$ python3  
Python 3.11.6 (main, Apr 10 2024, 17:26:07) [GCC 13.2.0] on linux  
Type "help", "copyright", "credits" or "license" for more information.  
>>> set1=set(["hello","from","annu"])  
>>> set1  
{'from', 'annu', 'hello'}  
>>> set2=set()  
>>> set2  
set()  
>>> set("helloworld")  
{'h', 'o', 'd', 'l', 'e', 'w', 'r'}  
>>> set()  
set()  
>>> set[0]  
set[0]  
>>> quit()  
anushka-patil@anushka-patil-1-0:~$
```

5)dictionary

```
anushka-patil@anushka-patil-1-0: ~  
anushka-patil@anushka-patil-1-0:~$ python3  
Python 3.11.6 (main, Apr 10 2024, 17:26:07) [GCC 13.2.0] on linux  
Type "help", "copyright", "credits" or "license" for more information.  
>>> dict={}  
>>> dict  
{}  
>>> Dict={'hii','pythyon','here'}  
>>> Dict  
{'here', 'pythyon', 'hii'}  
>>> Dict1=dict  
>>> Dict1  
{}
```