

Data Types

student_count = 521

rating = 4.99

ids = [43, 54, 76, 23]

is_published = false

course_name = "bm_150"

course_content = ""

multiple

lines

""

```
1 students_count = 1000
```

```
2 type()
```

```
3 type(object or name,  
4 bases, dict)
```

param object_or_name

type(object) -> the object's type

type(name, bases, dict) -> a new

Data Types

`student_count = 521`



`int`

`rating = 4.99`



`float`

`ids = [43, 54, 76, 23]`



`list`

`is_published = false`



`bool`

`course_name = "bm_150"`



`string`

`course_content = ""`


`multiple`

`lines`

`""`



`string`



```
>>>
>>> type(1.1)
<class 'float'>
>>> type(True)
<class 'bool'>
>>> type("")
<class 'str'>
>>> █
```

Lists

```
ids = [43, 54, 76, 23]
```

```
print (ids)
```

```
[43, 54, 76, 23]
```

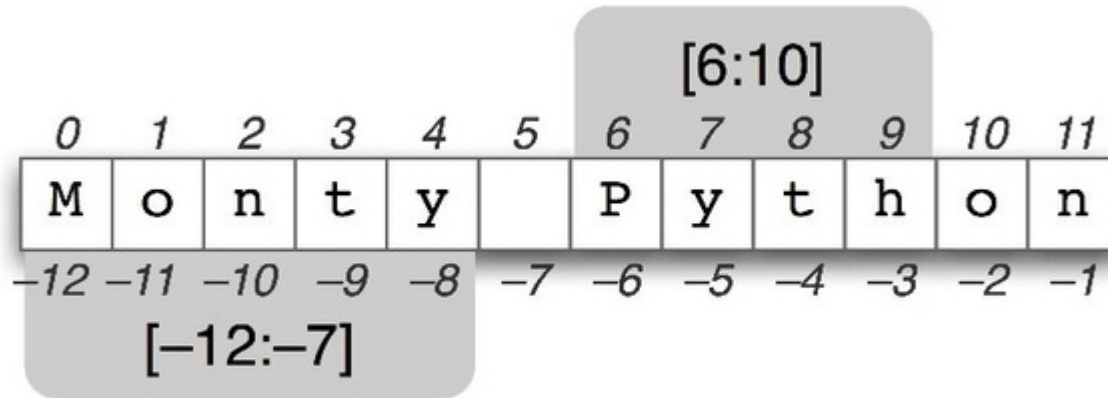
– List can be updated –

```
ids.append(88)
```

```
print (ids)
```

```
ids = [43, 54, 76, 23, 88]
```

Lists



ids = [43, 54, 76, 23]

- Positive Index -

```
print (ids[0])
```

[43]

- Positive Index -

```
print (ids[0:3])
```

[43, 54, 76]








- Negative Index -

```
print (ids[-1])
```

[23]

Slicing

```
text = "Sample Sentence"
```

<code>print (len(text))</code>		<code>15</code>
<code>print (text[0])</code>		<code>S</code>
<code>print (text[-2])</code>		<code>c</code>
<code>print (text[0:3])</code>		<code>Sam</code>
<code>print (text[:3])</code>		<code>Sam</code>
<code>print (text[0:])</code>		<code>Sample Sentence</code>
<code>print (text[:])</code>		<code>Sample Sentence</code>

Strings

```
first = "Name"  
last = "Surname"
```

```
full = first + " " + last
```

```
print (full)
```



Name Surname

```
first = "Name"  
last = "Surname"
```

```
full = f"{first} {last}"
```

```
print (full)
```



Name Surname

```
first = "Name"  
last = "Surname"
```

```
full = f"{len(first)} {len(last)}"
```

```
print (full)
```



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Strings

```
text = "Sample Sentence"
```

```
print (text.upper())
```

 → **SAMPLE SENTENCE**

```
print (text.lower())
```

 → **sample sentence**

```
print (text.title())
```

 → **Sample Sentence**

Strings

```
text = "Sample Sentence"
```

```
print (text.find("Sen"))
```



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```
print (text.replace("S", "_"))
```



_ample _entence

```
print (text.strip("e"))
```



Sample Sentenc

```
print (text.replace(" ", "\n"))
```



Sample
Sentence

Mathematics

$X = 10 + 3$	→ print (x) →	13
$X = 10 - 3$	→ print (x) →	7
$X = 10 * 3$	→ print (x) →	30
$X = 10 / 3$	→ print (x) →	3.3333333333333335
$X = 10 // 3$	→ print (x) →	3
$X = 10 \% 3$	→ print (x) →	1
$X = 10 ** 3$	→ print (x) →	1000

Converting

`x = input("x: ")` → 5

`print (str(x))` → 5

`print (int(x))` → 5

`print (float(x))` → 5.0

`print (bool(x))` → True

`print (list(x))` → ['5']

`print (tuple(x))` → ('5',)

Conditionals

```
age = input("Enter your age:\n")
```

—————→ 25

```
age = int(input("Enter your age:\n"))
```

—————→ 25

```
if age >= 18:  
    print ("Adult")
```

```
elif age >= 13:  
    print ("Teenager")
```

```
else:  
    print ("Child")
```

```
print ("All done!")
```

Conditionals

```
name = input("Enter your name:\n") → taner
```

```
names = ["taner", "defne", "john", "jane"]
```

```
if name in names:
```

```
    surname = input("Enter your surname:\n")
```

```
    print (f"{name} {surname} successsfully logged in!")
```

```
else:
```

```
    print ("Name is not in database!")
```

```
print ("All done!")
```