Welcome to the

Python Course

Why Python?

Python confirms his position as one of the most used programming language!

Just google it and see!

Position	PYPL ranking September 2022
#1	Python
#2	Java
#3	JavaScript
#4	C#
#5	C/C++
#6	PHP
#7	R
#8	TypeScript
#9	Go
#10	Swift

image source: https://www.stackscale.com/

Why Python?

- Easy to Understand
- Easy to Use
- Perfect for every kind of products
- … even for games logic!

Always say “Hello World!”

```
print ( “Hello World” )
```

Always say “Hello World!”

print (“Hello World”)

Always say “Hello World!”

print (“Hello World”)

Always say “Hello World!”

```
print ( “Hello World” )
```

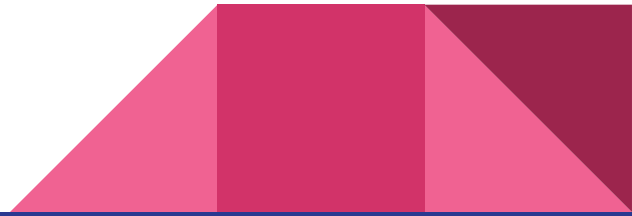
Let’s practice!

Variables

A variable is an information container. It has a NAME and a VALUE.

For example:

age = 10

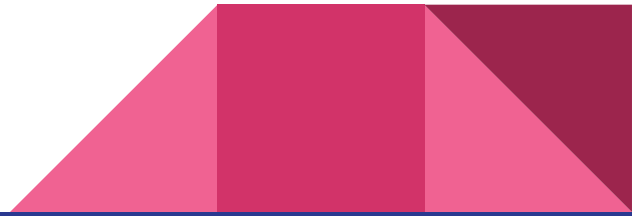


Variables

In Python, creating variable is very simple.

Just write the name, equal and the value.

You can also change the value, but pay attention to the order.

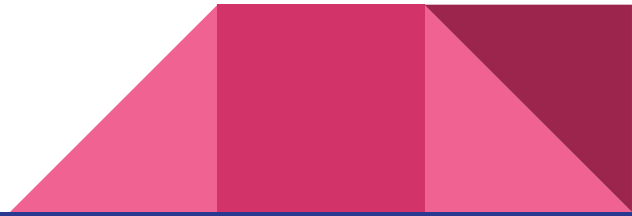


Variables

age = 10

age = 21

print(age) → 21



Types

Numbers:

integers , float

Words:

char , string

Numbers

Addition	2 + 2 → 4 2.5 + 3.2 → 5.7
Subtraction	5 - 3 → 2 2.5 - 5.3 → -2.8

Numbers

Multiplication	5 * 3 → 15
Division	5 / 2 → 2.5

Let’s practice!

Entering Values

input (message)

Entering Values

input (message)

Entering Values

input (message)

Entering Values

```
name = input ( “enter your name: ” )
```

Entering Values

input() is a function and returns ALWAYS strings!

age = input(“enter your age: ”)

age = age + 1 → error

int() & str()

int(“10”) → number 10

str(10) → string “10”

int(“hello”) → error

Let’s practice!

Strings

‘Hello’ → OK

“Hello” → OK

Hello → error

Strings Properties

Length:

word = “Hello”

len (word) → 5

Strings Properties

Index:

word = “Hello”

word[0] → ‘H’

word[4] → ‘o’

word[5] → error

Strings Properties

Index:

word = “Hello”

word[0 : 4] → ‘Hell’

Strings Properties

Search:

word = “Hello”

word.find(‘e’) → 1

find() is a Method.

Strings Properties

Format:

word = “Hello”

word.lower( ) → “hello”

lower() is a Method.

Let’s practice!

Boolean

A boolean variable can have only 2 values:

True & False

For example:

answer = True

Boolean

Those values can come from an expression.

For example:

$$(1 + 1 = 2) \rightarrow \text{True}$$

$$(1 + 1 = 7) \rightarrow \text{False}$$

Logical Operators

Equal	==
Unequal	!=
Greater / or equal	> / >=
Lower / or equal	< / <=

Logical Operators

Both True	and
At least 1 true	or
Negation	not

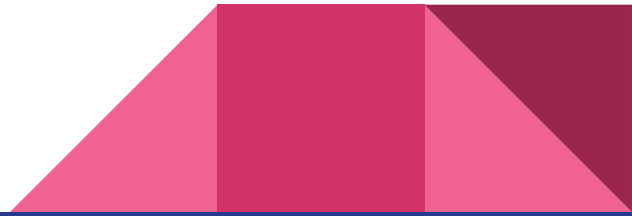
Logical Operators

For example:

(1 + 1 == 2) and (3 - 1 == 2) → True

(2 + 1 > 7) or (3 != 3) → False

not (1 + 1 < 2) → True



Let’s practice!

Conditional Operators

When you want to verify a statement, you can use *if*

For example:

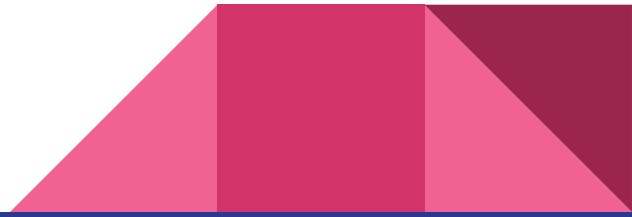
```
if True : print(“it’s true”)
```

Conditional Operators

```
if True : print(“it’s true”)
```

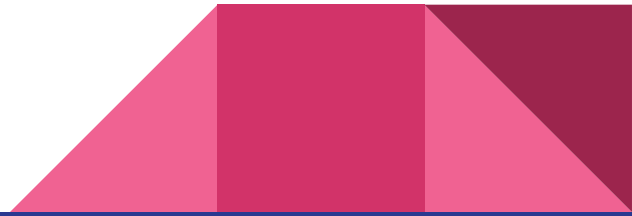
Conditional Operators

```
if (1+1==2) : print("it's true")
```



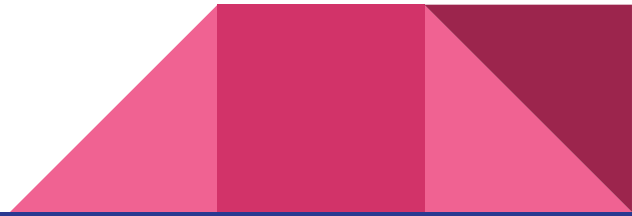
Conditional Operators

```
if (1+1!=2) : print(“it’s true”)
```



Conditional Operators

```
if (1+1!=2) : print("it's true")
else : print("it's false")
```



Conditional Operators

```
|if  answer == “yes” :
|                    | print (“you said yes”)
|                    | answer = input (“why yes?”)
|else :
|                    | print (“you said no”)
|                    | answer = input (“why no?”)
```

Let’s practice!