

AI BOOTCAMP

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wingsoft



Agenda

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Variables
Listas
Ciclos
Funciones

02

OpenAI y LangChain
LLM
Memoria
Tools
Agente

03

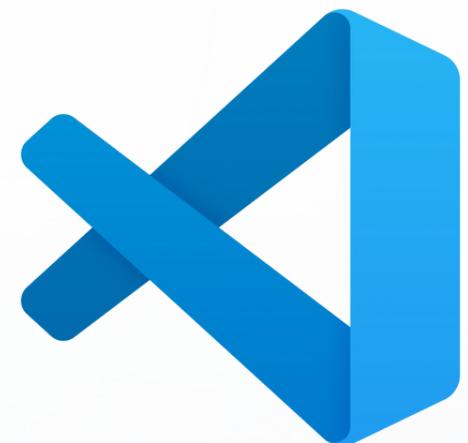
AI Tools
Voice-Text
Text-Speech
Text-Image
Image-Video
Llama2

INTRODUCCION

Let's Go!

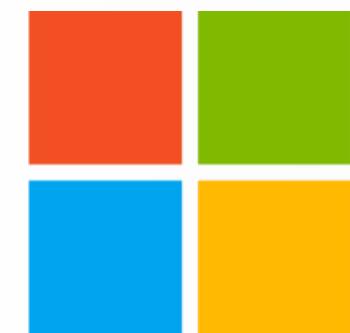


[github.com
inostroza7/Python-Basics](https://github.com/inostroza7/Python-Basics)





python.org

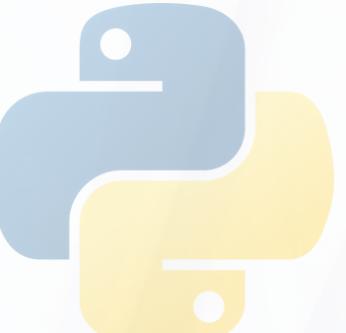


Microsoft

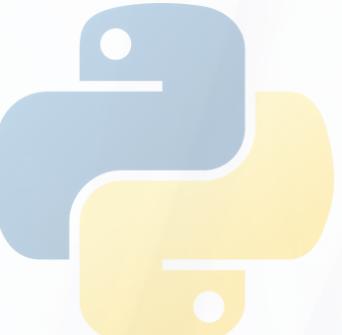


PYTHON BASICS

Hello World



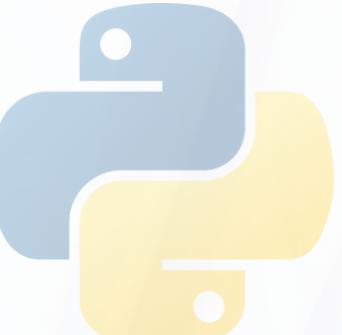
```
print('Hola Mundo')
```



Variables

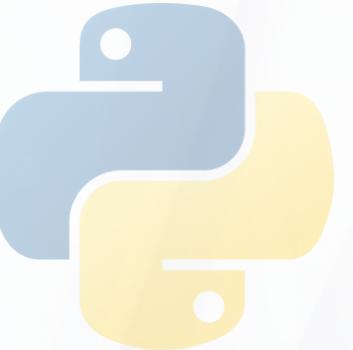
string	int	float	bool
'Hola Mundo'	7	0.7	True
'Juan'	14	15.2	False

```
mi_primerVariable = 'Mi primer string'  
print(mi_primerVariable)
```



Variables

```
nombre = 'Gustavo'  
print('Mi nombre es ', nombre)
```



Variables Válidas

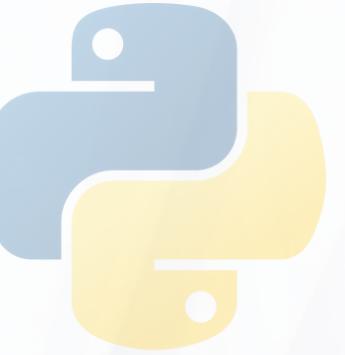
miVariable
mi_variable
var1



Variables inválidas

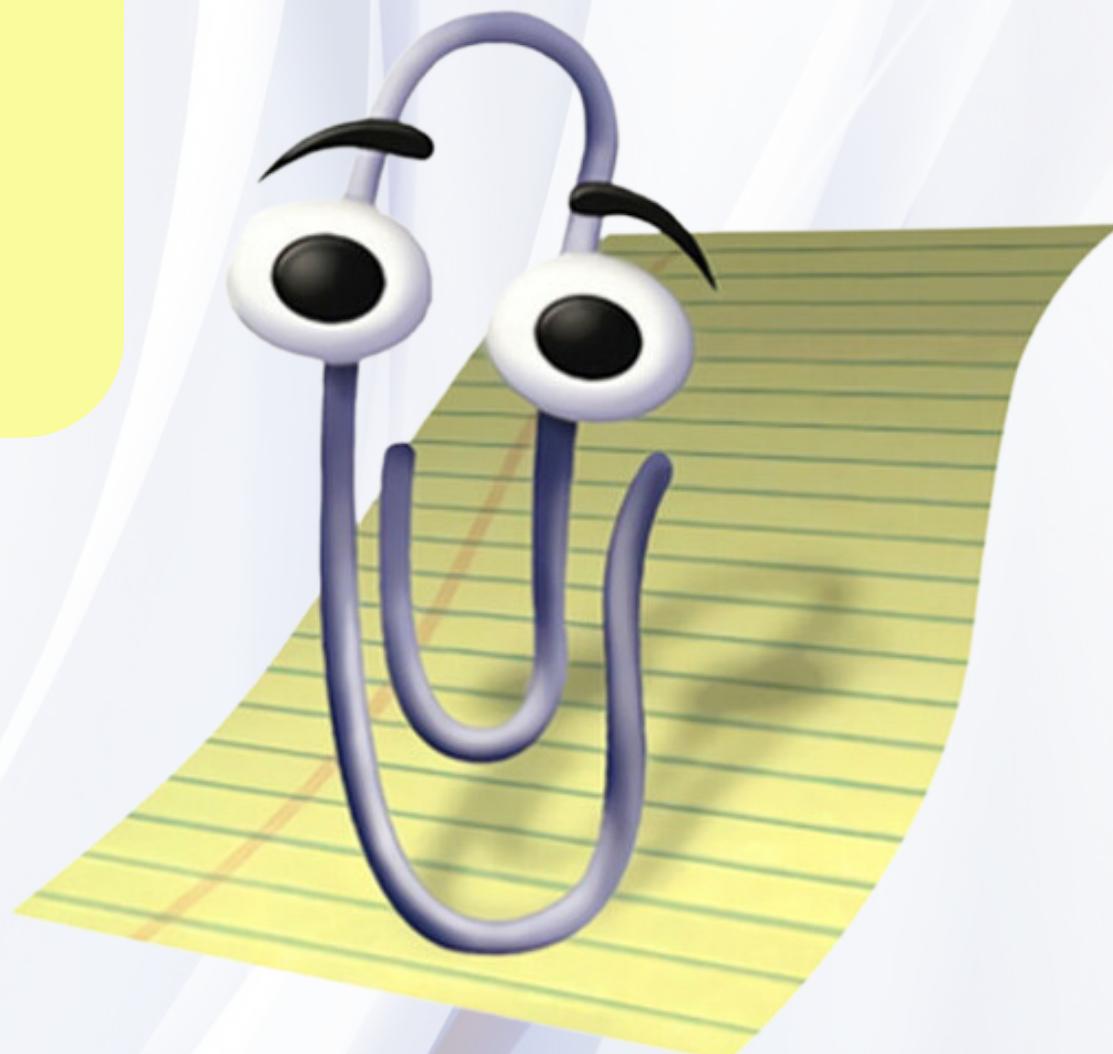
mi-variable
miv@riable
lvar

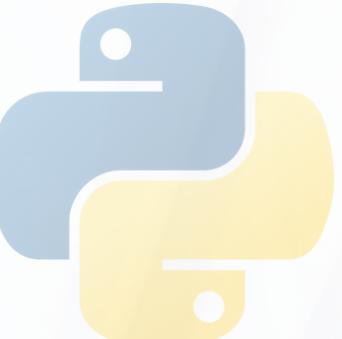




Usa la función `type()`, para saber el tipo de variable que tienes.

Ejemplo: `print(type(x))`





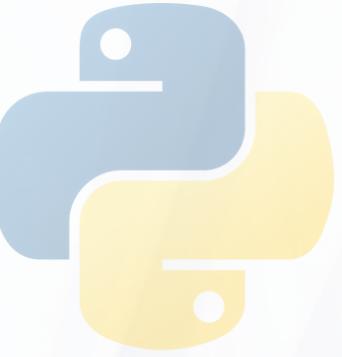
Operadores + - / * >< ==

```
x = 5  
y = 10  
print(x+y)
```

```
z = x + y  
print(z)
```

```
nombre = 'Gustavo'  
intro = 'Hola, mi nombre es'  
print(intro+nombre)
```

```
introFull = intro + nombre  
print(introFull)
```

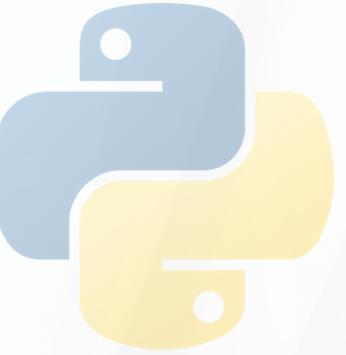


Listas []

```
listaFrutas = ['manzana', 'naranja', 'platano']  
print(listaFrutas)
```

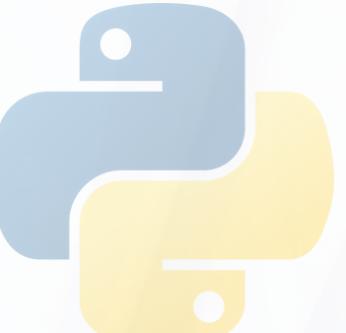
```
print(listaFrutas[0])  
print(listaFrutas[-1])
```

*len(), append(), insert(), remove(), pop(), sort()



Tuplas ()

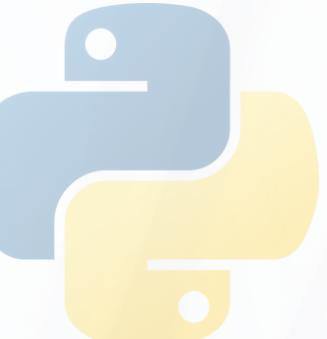
```
listaFrutas = ('manzana' , 'naranja' , 'platano')  
print(listaFrutas[0])  
print(listaFrutas[-1])
```



Diccionario {}

```
inventario= {  
    'frutas': ['manzana', 'naranja', 'platano'],  
    'verduras': ['zanahoria', 'espinaca', 'brocoli']  
}
```

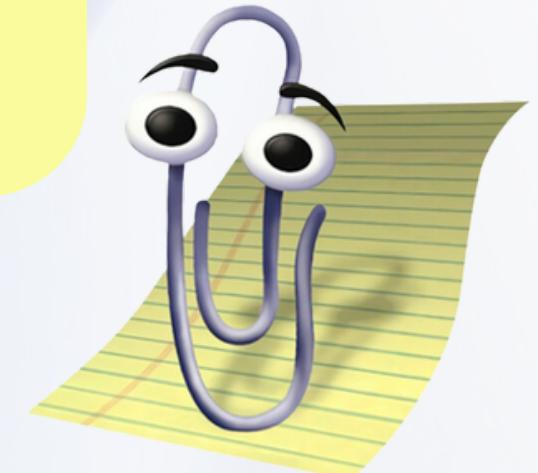
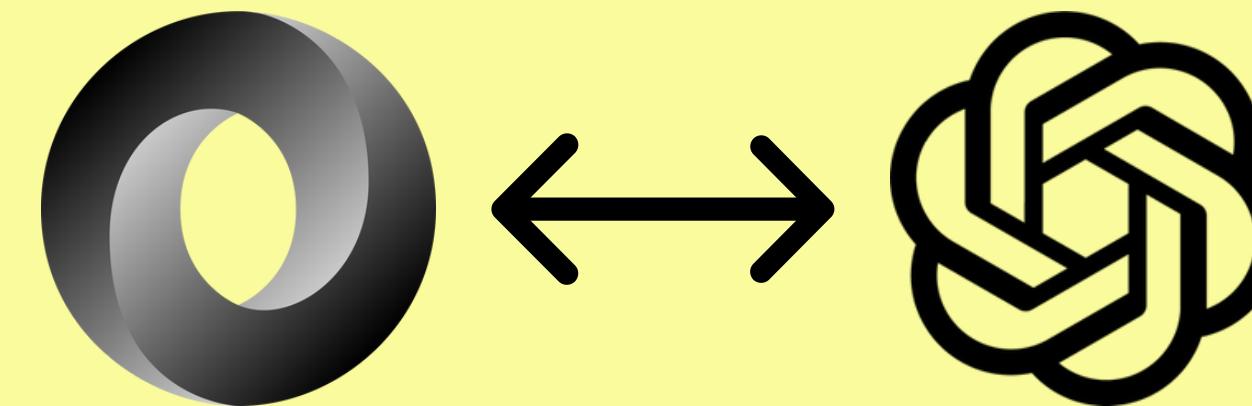
```
inventario['frutas'][0]
```



Diccionario {}

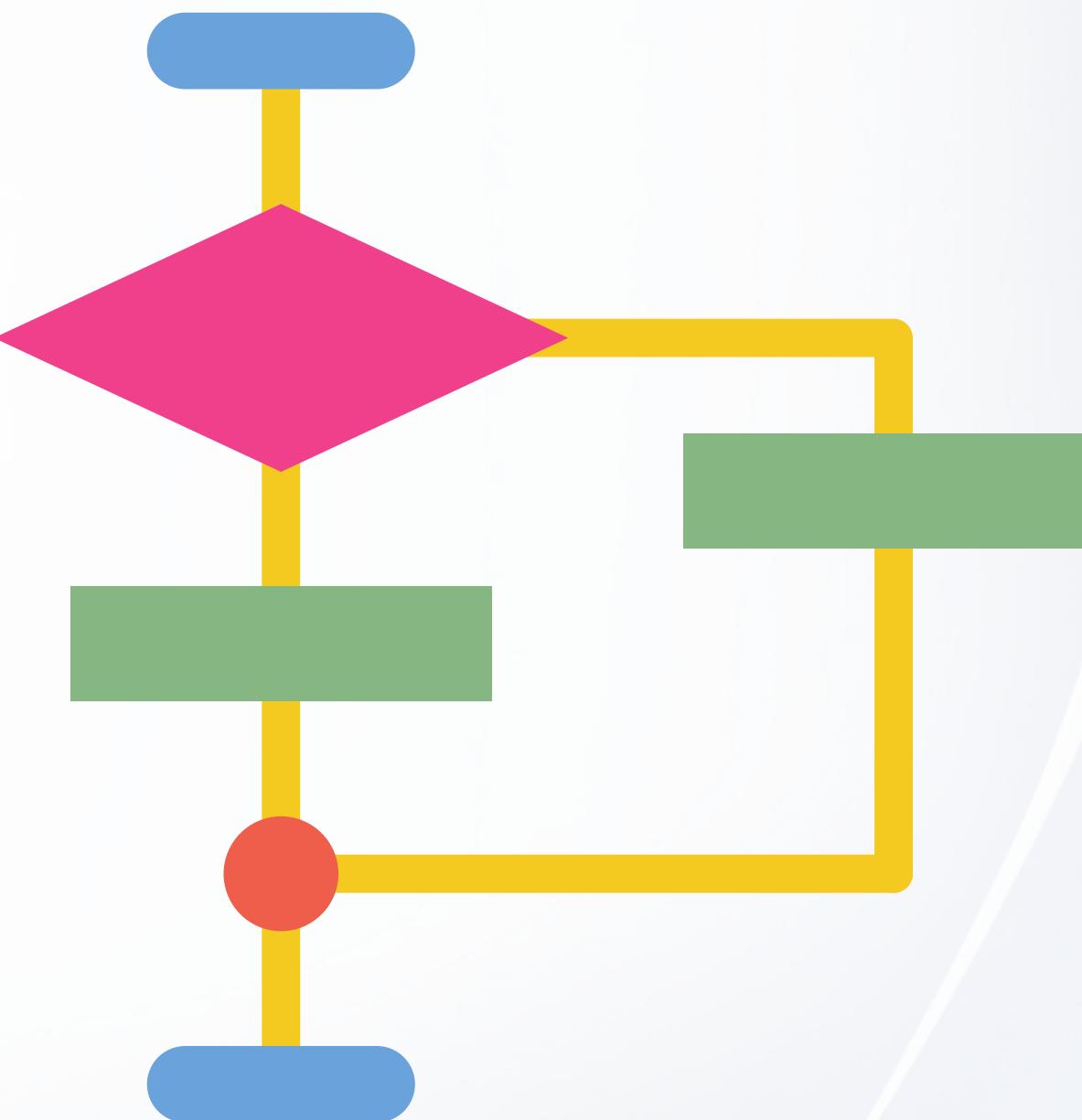
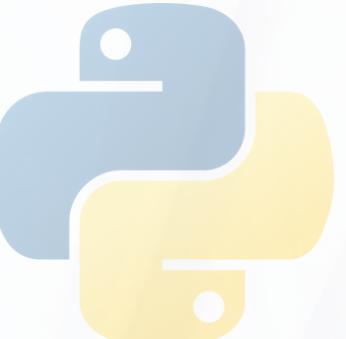
```
{  
    "Frutas": {  
        "Manzana": {  
            "cantidad": 10,  
            "precio": 1.2},  
        "Banana": {  
            "cantidad": 8,  
            "precio": 0.5}},  
    "Verduras": {  
        "Zanahoria": {  
            "cantidad": 15,  
            "precio": 0.7},  
        "Brócoli": {  
            "cantidad": 5,  
            "precio": 1.5}}  
}
```

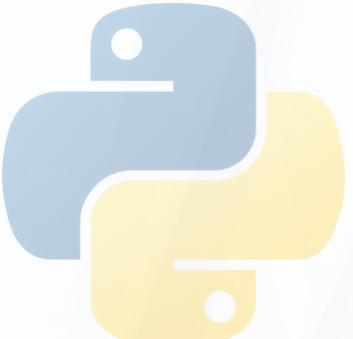
Es muy similar al formato JSON con el que se interactúa con los modelos como OpenAI



PYTHON BASICS

Ciclos

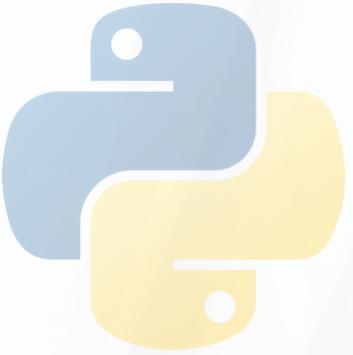




If - Else

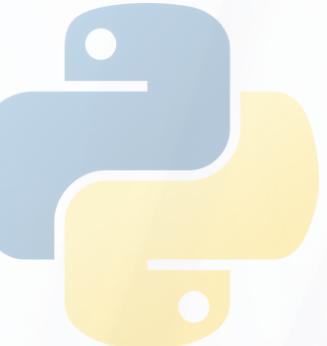
```
x = 7  
if x > 0:  
    print('x es positivo')
```

```
x = 7  
if x > 0:  
    print('x es positivo')  
else:  
    print('x es negativo')
```



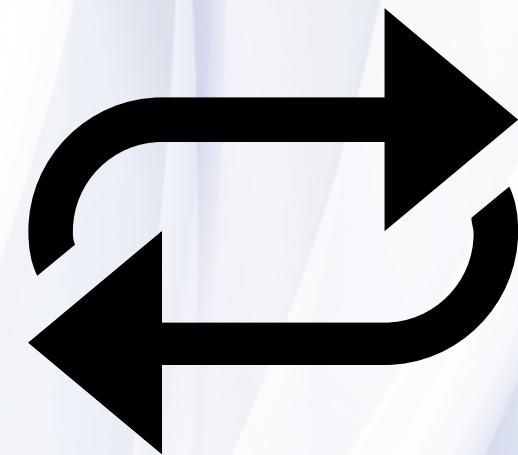
Elif

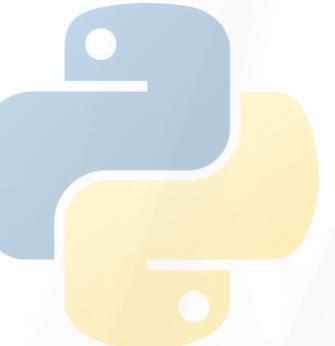
```
x = 0
if x == 0:
    print('x es 0')
elif x > 0:
    print(f'{x} es positivo')
else:
    print(f'{x} es negativo')
```



Loops

```
vuelta = 0
while vuelta < 7:
    print(vuelta)
    vuelta = vuelta + 1
```

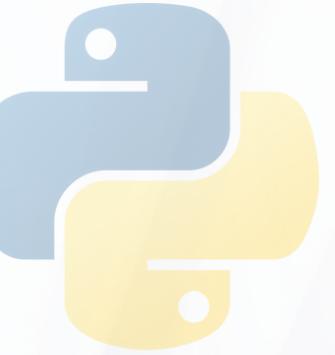




While

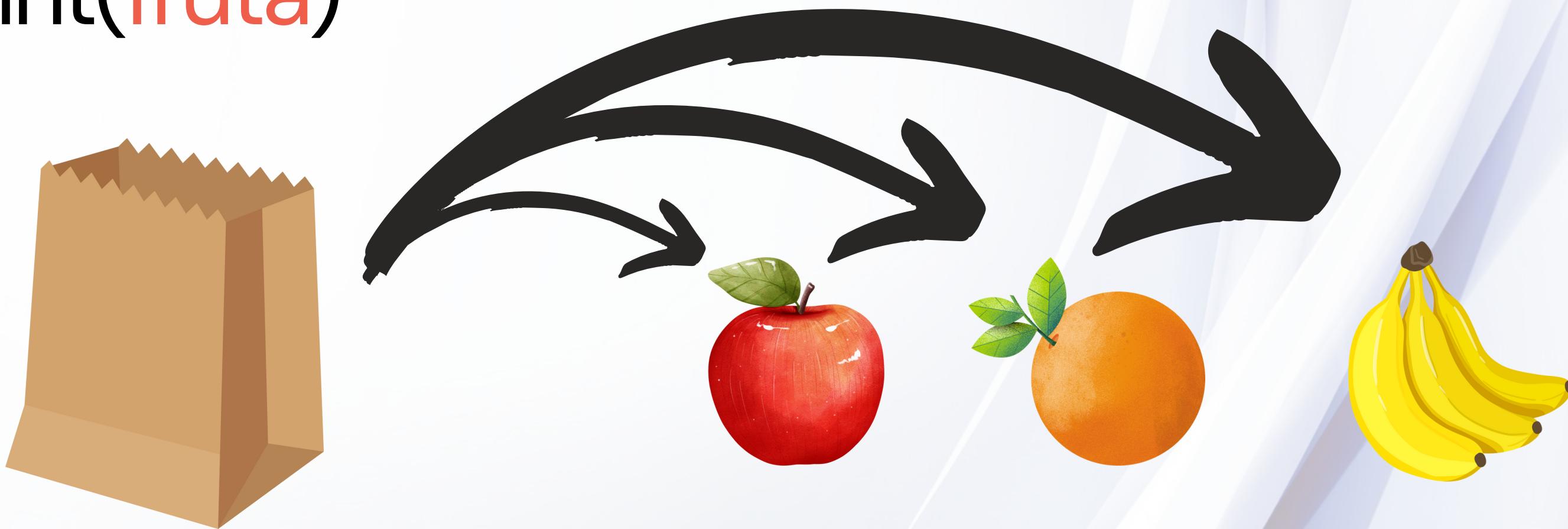
```
vuelta = 0
while vuelta < 5:
    print(vuelta)
    vuelta = vuelta + 1
    if vuelta == 3:
        break
```

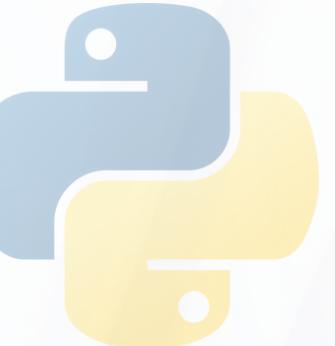




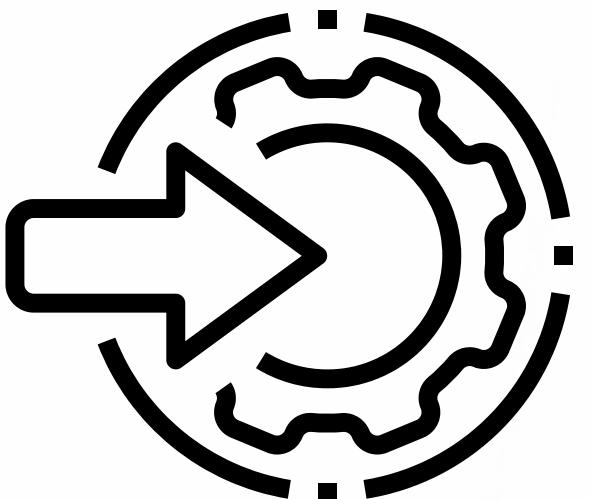
for

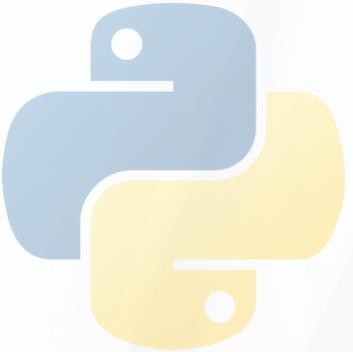
```
listaFrutas = ['manzana', 'naranja', 'platano']
for fruta in listaFrutas:
    print(fruta)
```





Funciones


$$f(x)$$

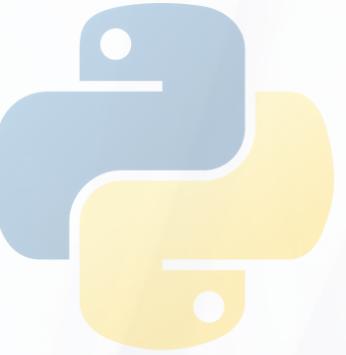
Funciones

```
def sumar():
    x = 2
    y = 3
    z = x + y
sumar()
```

```
def cuadrado(x):
    y = x*x
    return y
```



```
def edad(añoActual, añoNac):
    edad = añoActual - añoNac
    return edad
```



Módulos

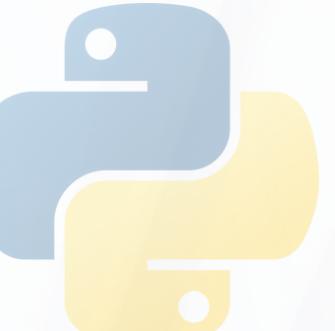
import math

math.sqrt(25)
math.pow(2,3)

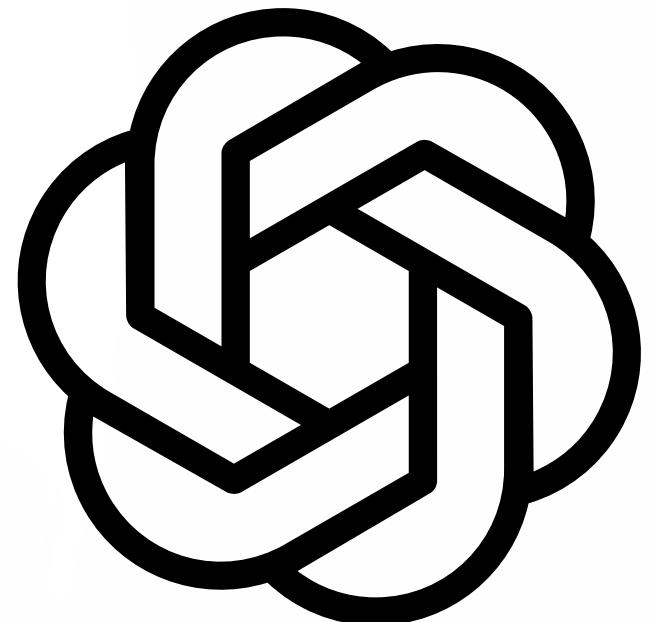
from math import pi

print(pi)

PYTHON BASICS



You're Ready!



LangChain

PYTHON BASICS

OpenAI API

