

# Hello, world!

April 9, 2020

This is a first simple notebook showing how to print to console and how to read from it.

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## 1 I/O to console

### 1.1 Print to console

Let's try to be polite

```
[1]: print('Hello, world!')
```

Hello, world!

When printing to console, we can concatenate more sentences

```
[2]: print('Hello, world!', 'What a beautiful day.', 'Indeed.')
```

Hello, world! What a beautiful day. Indeed.

### 1.2 Read from console

What if we want to send personal greetings!?

```
[3]: print('What is your name?')
      name=input()
      print('Hello,', name)
```

What is your name?

Andrea

Hello, Andrea

The read input is in a new line. How can I keep it in the same line? This solution offers a better result.

```
[4]: name=input('What is your name? ')
      print('Hello,', name)
```

What is your name? Andrea

Hello, Andrea

```
[5]: sign=input('What is your zodiac sign?')
```

What is your zodiac sign? Sagittarius

```
[6]: print('I foresee that in the coming months',sign,'will learn Python.')
```

I foresee that in the coming months Sagittarius will learn Python.

## 2 Variables

Note that `name` and `sign` are **variables** that will store the read inputs.

```
[7]: print('Hello again,', name)
```

Hello again, Andrea

```
[8]: print('Dear',name,'I foresee that in the coming months',sign,'will learn Python.
      ↪')
```

Dear Andrea I foresee that in the coming months Sagittarius will learn Python.

Every variable has a *name*. This name can start with a letter, a `_`,

```
[9]: n=5
     print(n)
```

5

```
[10]: _n=5
      print(_n)
```

5

Variables can contain other characters, but not as first one.

```
[11]: n1=5
     print(n1)
```

5

```
[12]: 1n=5
     print(1n)
```

```
File "<ipython-input-12-7a3b216150d8>", line 1
1n=5
```

~  
SyntaxError: invalid syntax

The values of variables can be updated.

```
[ ]: n=6  
      print(n)
```

We can even assign the value of a variable to another one

```
[ ]: print('Before:',n,n1)  
      n1=n  
      print('After',n,n1)
```

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### 3 Next week...

Next week we will see that every variable has a *type*. Actually, everything has a type in Python. Everything is an *object* ...

```
[ ]: n1 = 5  
      n2 = 1.4e-2  
      n3 = 'Ciao'  
      n4 = n1 + n2  
      n5 = n1 + n3
```

```
[ ]:
```