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PYTHON



BASICS

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- Last time we've introduced some basic concepts of programming using Python today this introduction will be devoted to apply what we've learnt doing 4 exercise together.
- We have a lot of IDE¹ available on python but I'd like to use a normal command line so use any text editor that you want and write a python code for example:

```
print("Hello World!")
```

- Save this file with extension py (something like hello_world.py)
- Run you code writing

```
Python hello_world.py
```

That's all folks.

¹ An integrated development environment (**IDE**) is a software application that provides comprehensive facilities to computer programmers for software development

Example zero

- This is only to remember different types of variables that we've introduced and to use `type()`:

```
a = "I am here for a python?"
```

```
b = 10
```

```
pi = 3.14157
```

```
print(type(a))
```

```
print(type(b))
```

```
print(type(pi))
```

```
print(a)
```

```
print(b)
```

```
print(pi)
```

Example one

- **Take two inputs from keyboard and check whether they are equal or not**

To put something on the screen I'm really proud to say that today facebook has published results about all more interesting application written this year and into the first 25 people 10 are italian.

[link](#)

- a type of solution (anyone can write a different one)

```
print("Enter first number")
```

```
first = input()
```

```
print("Enter second number")
```

```
second = input()
```

```
print(first == second)
```

Example two

- Take 3 inputs from user and check: all are equal any of two are equal (use and or)

While people are working on this exercise this is a list of main companies that are using python in his environment :

- [Industrial Light and Magic](#)
- [Google](#)
- [Facebook](#)
- [Instagram](#)
- [Spotify](#)
- [Quora](#)
- [Netflix](#)
- [Dropbox](#)
- [Reddit](#)
- [Anyone Else?](#)

• a type of solution (anyone can write a different one)

```
print("first number")
```

```
first = input()
```

```
print("second number")
```

```
second = input()
```

```
print("third number")
```

```
third = input()
```

```
all = first == second and second == third and third == first
```

```
print("All are equal:",all)
```

```
any = first == second or second == third or third == first
```

```
print("Any of three are equal:",any)
```

Example three

- **Take two numbers and check whether the sum is greater than 5, less than 5 or equal to 5**
- [Battlefield 2](#) uses Python for all of its add-ons and a lot of its functionality. ^[citation needed]
- [Bridge Commander](#) ^[citation needed]
- [Civilization IV](#) uses Python for most of its tasks
- [Disney's Toontown Online](#) is written in Python and uses [Panda3D](#) for graphics.
- [Doki Doki Literature Club!](#), a psychological horror visual novel using the [Ren'Py](#) engine
- [Eve Online](#) uses [Stackless Python](#).
- [Freedom Force](#) ^[citation needed]
- [Frets on Fire](#) is written in Python and uses [Pygame](#)
- [Mount & Blade](#) is written in Python.
- [Pirates of the Caribbean Online](#) is written in Python and uses [Panda3D](#) for graphics.
- [The Sims 4](#) uses Python^[1]
- [The Temple of Elemental Evil](#), a computer role-playing game based on the classic [Greyhawk](#) Dungeons & Dragons campaign setting
- [Unity of Command \(video game\)](#) is an operational-level wargame about the 1942/43 Stalingrad Campaign on the Eastern Front.
- [Vampire: The Masquerade – Bloodlines](#), a computer role-playing game based on the [World of Darkness](#) campaign setting ^[citation needed]
- [Vega Strike](#), an open source space simulator, uses Python for internal scripting
- [World of Tanks](#) uses Python for most of its tasks.^[2]

- a type of solution (anyone can write a different one)

```
print("Enter first number")
```

```
first = input()
```

```
print("Enter second number")
```

```
second = input()
```

```
sum = first+second
```

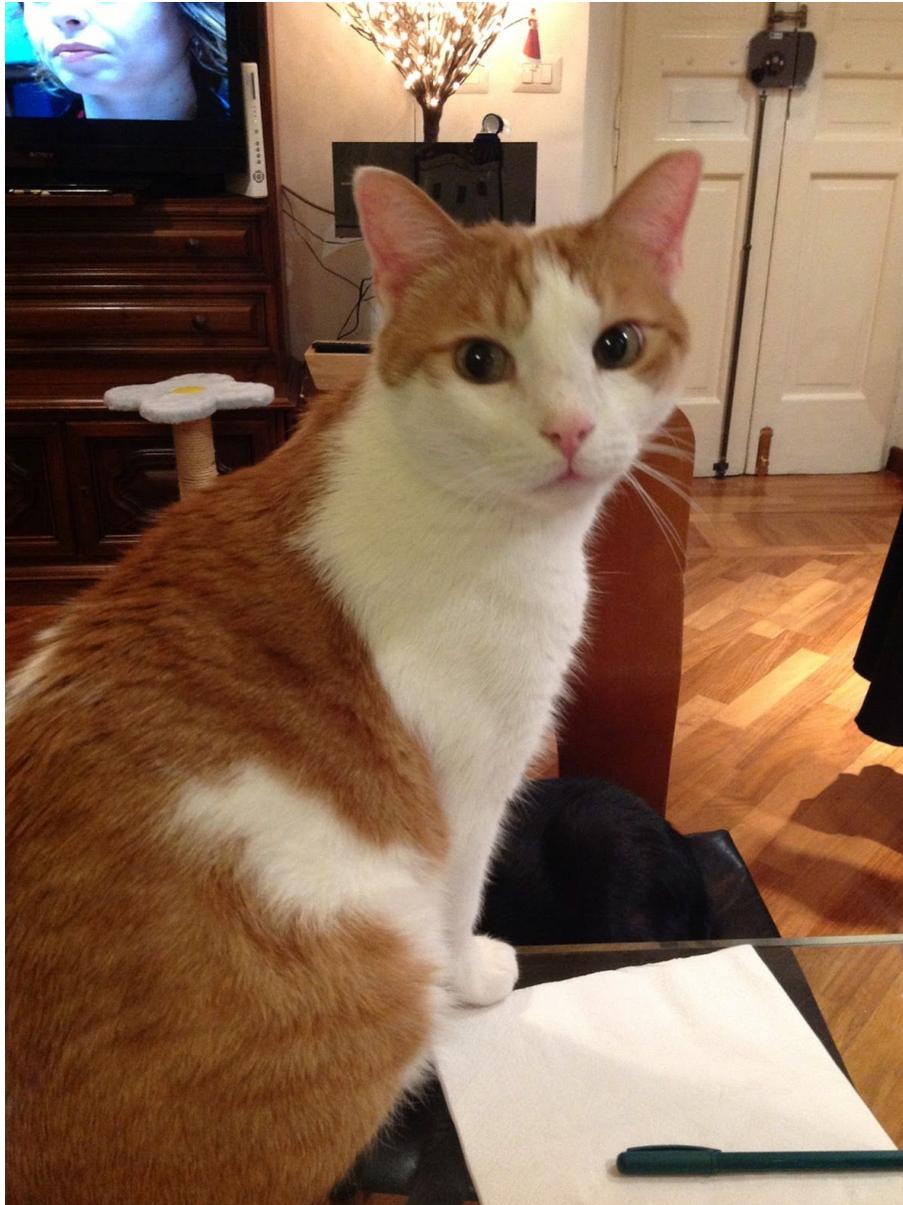
```
print("Sum is greater than 5:",sum>5)
```

```
print("Sum is equal to 5:",sum==5)
```

```
print("Sum is lesser than 5:",sum<5)
```

Example four

- Judge the following expressions: `not(True and True)`, `True or False`, `not(False and True)`, `False and False`



And this is a cat!!!

• a type of solution (anyone can write a different one)

```
print(not(True and True))
```

```
print(True or True)
```

```
print(not(False and False))
```

```
print(False and False)
```