

# Introduction to Computer Programming

## Day 2: Setting up python environment

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# Slides

All slides available at

- [https://github.com/forrestbao / PythonClass](https://github.com/forrestbao/PythonClass)

# Install on MacOS

## Step 0

Open terminal

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## Step 1

Install Homebrew <https://brew.sh/>

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Install Homebrew <https://brew.sh/>

## Step 2

```
1 brew install python
```

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## Verify your installation

```
1 python
2 >> 1 + 2
3 3
```

# Install on Windows

## Step 1

Download the binary **python3** installer from `python.org` <sup>a</sup>, and install. You will get:

- a python shell executer
- IDLE shell and editor

Add **python** to your **PATH** during the installation. Or you can rerun the installer to add it later.

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<sup>a</sup><https://www.python.org/downloads/windows/>

# Install on Windows

## Try IDLE

Search and open IDLE in launcher.



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## Try shell

Open terminal (command prompt) and type `python` (you need to add `python` to your `PATH` during installation):

```
1 python
2 >> 1 + 2
3 3
```

# Install on Linux

Use your distribution package manager to install python.

Ubuntu

```
1 apt install python
```

Arch Linux

```
1 pacman -S python
```

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Make sure you installed **python3**

```
1 python --version
```

# Running python

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## Interactive shell

```
1  # python
2  >>> 1 + 2
3  3
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## run a .py file

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1  python file.py
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## IDEs

- IDLE
- Editor + plugins
- Other IDEs e.g. VS Code

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## Web: Jupyter notebook



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## Install

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## Start a jupyter lab

```
1 jupyter lab
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# Exercise

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## E1: Hello World

Print "hello <your name>" out.

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## E2: calculate factorial 50

$$fact_n = n * fact_{n-1}$$

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Print "hello <your name>" out.

E2: calculate factorial 50

$$fact_n = n * fact_{n-1}$$

E3: print all even numbers under 20