

# How to Install Python3 on MacOS

## Introduction

Python is a high level, dynamic, general purpose language. It was developed by **Guido Van Rossum** in **1991**. Python's syntax allows developers to use fewer lines of code than any other programming language. It basically focuses on the code readability of program. Python 2.7 is installed by default on MacOS but we can install other versions like python 3.5 and 3.6.

In this tutorial, we are learning how to install Python 3.6.3 on the MAC Operating system.

## Prerequisites

- MacOS
- Login as an administrator on terminal

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## Installation

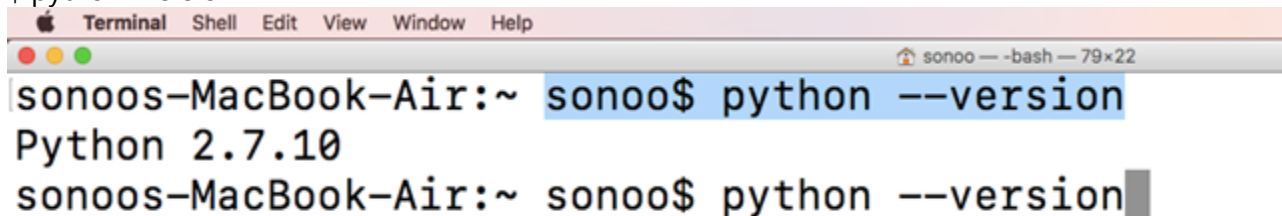
There are following steps which are used while installing Python3 on MacOS.

### 1) Checking python's version on the system

We can check which version of the Python is currently installed on our system. Generally, Python 2.7 is installed by default.

Let's see how can we do it.

1. `$ python -version`

A screenshot of a macOS Terminal window. The title bar shows 'Terminal' with menu options 'Shell', 'Edit', 'View', 'Window', and 'Help'. The status bar at the bottom indicates 'sonoo - -bash - 79x22'. The terminal content shows the prompt 'sonoos-MacBook-Air:~ sonoo\$' followed by the command 'python --version' which is highlighted in blue. The output 'Python 2.7.10' is displayed on the next line. The prompt is repeated on the third line: 'sonoos-MacBook-Air:~ sonoo\$ python --version'.

It shows **Python 2.7.10** is installed on the computer which is quite often.

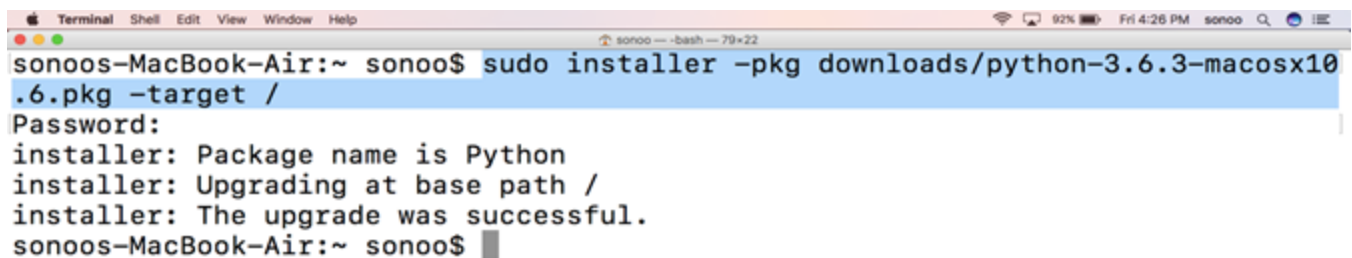
## 2) Download Python 3.6.3

In order to install Python 3.6.3, we must download the latest version from its official website <https://www.python.org/downloads/>. The file is downloaded in **.pkg** format which can be directly installed by using **Installer** command.

## 3) Install Python 3.6.3

Since the downloaded file already is in **.pkg** format hence no mounting is required and We can use installer command to install Python 3.6.3.

Let's see how can we do it.

A screenshot of a macOS Terminal window. The title bar shows 'Terminal' with menu options 'Shell', 'Edit', 'View', 'Window', and 'Help'. The status bar at the top right shows 'sonoo' and 'Fri 4:26 PM'. The terminal content shows the user 'sonoo' at the prompt 'sonooos-MacBook-Air:~ sonoo\$' typing the command 'sudo installer -pkg downloads/python-3.6.3-macosx10.6.pkg -target /'. The command is highlighted in blue. The output shows 'Password:' followed by 'installer: Package name is Python', 'installer: Upgrading at base path /', and 'installer: The upgrade was successful.' The prompt returns to 'sonooos-MacBook-Air:~ sonoo\$'.

Since The installer is used with super user permissions hence **sudo** forces terminal to prompt the user to fill the admin password. The process installs the Python 3.6.3 to the root directory which is mentioned with the target option.

## 4) Verify Python3

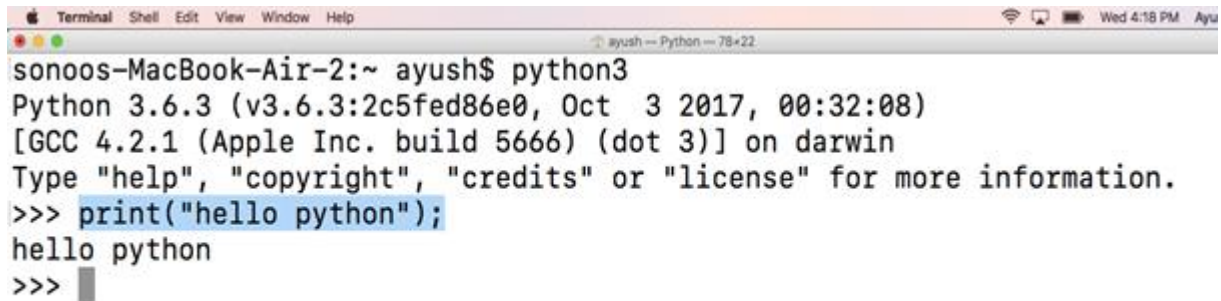
To check which Python version is installed on the machine, we can use **python -version** command. Since by default installed version is Python 2.7.10 hence it shows python 2.7.10. but it gives us flexibility to check the version of Python 3 on our computer.

Let's see how can we use python 3 to check which version of python 3 is running.

1. \$ python -version

## 5) Working on Python's script mode

To work on Python command line, we simply type **python3** on the terminal. **Python shell open where we can run Python statements such as print statements as we did here.**

A screenshot of a macOS Terminal window. The title bar shows 'Terminal' and standard menu options (Shell, Edit, View, Window, Help). The status bar at the top right indicates the user is 'ayush' and the window title is 'Python -- 78x22'. The terminal text shows the user running 'python3' at the prompt 'sonoos-MacBook-Air-2:~ ayush\$'. The output displays the Python version '3.6.3 (v3.6.3:2c5fed86e0, Oct 3 2017, 00:32:08)' and the compiler '[GCC 4.2.1 (Apple Inc. build 5666) (dot 3)] on darwin'. It also provides instructions to type 'help', 'copyright', 'credits', or 'license' for more information. The user then enters '>>> print("hello python");' and the terminal outputs 'hello python'. The prompt '>>>' is followed by a cursor.

```
sonoos-MacBook-Air-2:~ ayush$ python3
Python 3.6.3 (v3.6.3:2c5fed86e0, Oct 3 2017, 00:32:08)
[GCC 4.2.1 (Apple Inc. build 5666) (dot 3)] on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> print("hello python");
hello python
>>> █
```

To run a Python file (**.py**) on the terminal, we simply type the file name and the file will be interpreted.

Well, we have installed Python3 on our MacOS.