

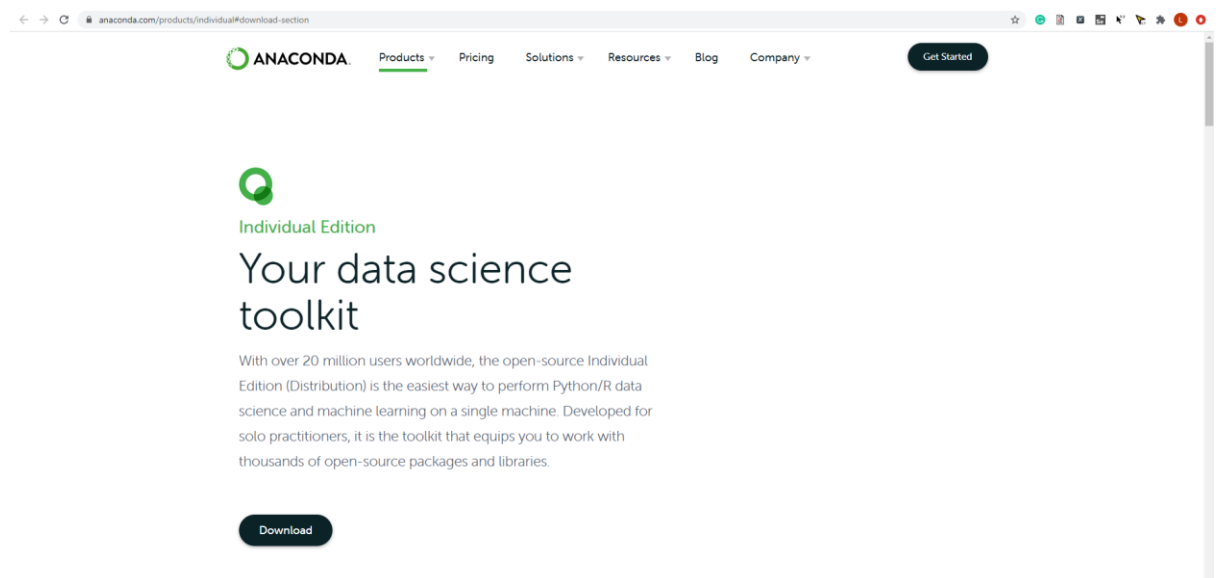
# Instalasi dan *setting up environment*

Sebelum memulai belajar menggunakan Python, terlebih dahulu kita perlu untuk melakukan *setting up environment* pada komputer yang akan digunakan. *Setting up environment* ini bertujuan untuk menyiapkan software dan framework yang akan digunakan untuk melakukan proses pembuatan model.

## Membuat conda *environment* baru

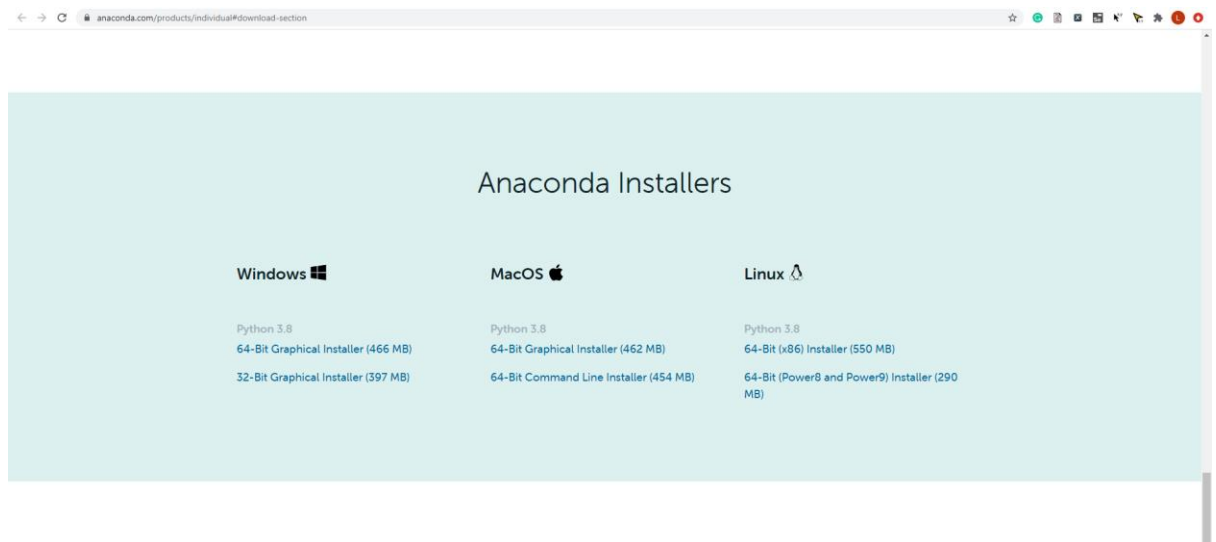
1. Download Anaconda di dalam link berikut ini:

<https://www.anaconda.com/distribution/#download-section>

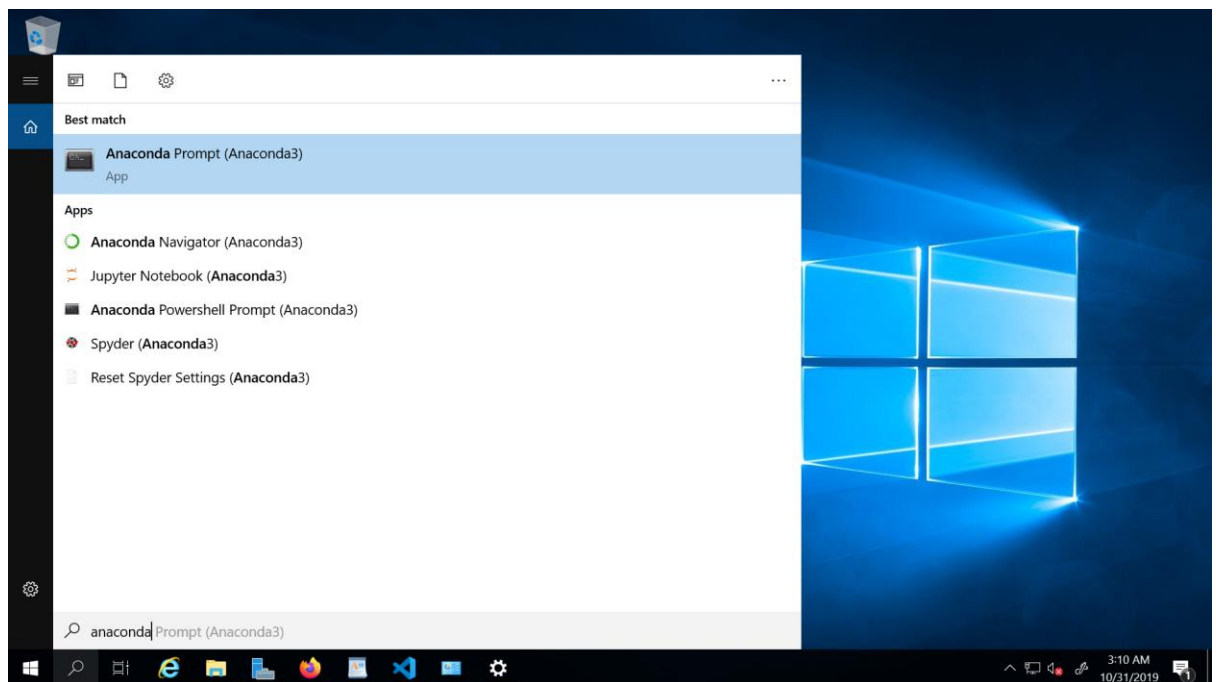


Anaconda adalah software yang akan menyediakan *environment* di dalam komputer kita, di mana kita akan menginstall Python, sebagai bahasa pemrograman yang akan digunakan.

2. Klik Download pada gambar 1. Lalu pilih installer yang sesuai dengan OS dari komputer kita masing-masing.



3. Jika proses instalasi Anaconda sudah dilakukan, langkah selanjutnya buka Anaconda Command Prompt



4. Selanjutnya buat *conda virtual environment* dengan mengetikkan:

```
conda create -n geolytics_env pip python=3.8
```

Anaconda Prompt (Anaconda3)

```
(base) C:\Users\Lucas Elbert Suryana>conda create -n geolytics_env pip python=3.8
```

Step di atas akan membuat *environment* baru dengan nama `geolytics_env`

5. Jika langkah 4 sudah dijalankan, maka Anaconda Command Prompt akan meminta persetujuan kepada kita untuk menginstall *environment* tersebut. Ketikkan `y` lalu klik enter. Tunggu sampai proses instalasi selesai, akan memakan waktu sekitar 5 menit, tergantung dengan kecepatan internet.

```

Anaconda Prompt (Anaconda3) - jupyter notebook

ca-certificates-2021.5.25      haa95532_1      112 KB
certifi-2021.5.30             py38haa95532_0  140 KB
openssl-1.1.1k                h2bfff1b_0      4.8 MB
pip-21.1.1                    py38haa95532_0  1.8 MB
python-3.8.10                 hdbf39b2_7      15.9 MB
setuptools-52.0.0             py38haa95532_0  726 KB
sqlite-3.35.4                 h2bfff1b_0      761 KB
vc-14.2                       h21ff451_1       8 KB
vs2015_runtime-14.27.29016    h5e58377_2     1007 KB
wheel-0.36.2                  pyhd3eb1b0_0     33 KB
-----
Total:                        25.2 MB

The following NEW packages will be INSTALLED:

ca-certificates    pkgs/main/win-64::ca-certificates-2021.5.25-haa95532_1
certifi            pkgs/main/win-64::certifi-2021.5.30-py38haa95532_0
openssl            pkgs/main/win-64::openssl-1.1.1k-h2bfff1b_0
pip                pkgs/main/win-64::pip-21.1.1-py38haa95532_0
python             pkgs/main/win-64::python-3.8.10-hdbf39b2_7
setuptools          pkgs/main/win-64::setuptools-52.0.0-py38haa95532_0
sqlite             pkgs/main/win-64::sqlite-3.35.4-h2bfff1b_0
vc                 pkgs/main/win-64::vc-14.2-h21ff451_1
vs2015_runtime     pkgs/main/win-64::vs2015_runtime-14.27.29016-h5e58377_2
wheel              pkgs/main/noarch::wheel-0.36.2-pyhd3eb1b0_0
wincertstore       pkgs/main/win-64::wincertstore-0.2-py38_0

Proceed ([y]/n)?

```

6. Sekarang aktifkan *environment* yang sudah dibuat dengan menggunakan perintah berikut:

```
conda activate geolytics_env
```

```

Anaconda Prompt (Anaconda3) - jupyter notebook

Proceed ([y]/n)?

Downloading and Extracting Packages
ca-certificates-2021 | 112 KB | ##### | 100%
openssl-1.1.1k       | 4.8 MB | ##### | 100%
setuptools-52.0.0    | 726 KB | ##### | 100%
sqlite-3.35.4        | 761 KB | ##### | 100%
pip-21.1.1           | 1.8 MB | ##### | 100%
wheel-0.36.2         | 33 KB  | ##### | 100%
vc-14.2              | 8 KB   | ##### | 100%
vs2015_runtime-14.27 | 1007 KB | ##### | 100%
python-3.8.10        | 15.9 MB | ##### | 100%
certifi-2021.5.30    | 140 KB | ##### | 100%
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
#
# To activate this environment, use
#
#     $ conda activate geolytics_env
#
# To deactivate an active environment, use
#
#     $ conda deactivate
#

(base) C:\Users\Lucas Elbert Suryana>conda activate geolytics_env

```

7. Jika sudah benar, maka (base) akan berubah menjadi (geolytics\_env) seperti pada gambar di bawah
8. Ketikkan Jupyter Notebook

```
Anaconda Prompt (Anaconda3) - jupyter notebook

(base) C:\Users\Lucas Elbert Suryana>conda activate geolytics_env

(geolytics_env) C:\Users\Lucas Elbert Suryana>jupyter notebook
[I 07:53:05.721 NotebookApp] The port 8888 is already in use, trying another port.
[I 07:53:06.068 NotebookApp] [jupyter_nbextensions_configurator] enabled 0.4.1
[I 07:53:08.424 NotebookApp] JupyterLab extension loaded from C:\Program Files\ArcGIS\Pro\bin\Python\envs\arcgispro-py3\lib\site-packages\jupyterlab
[I 07:53:08.424 NotebookApp] JupyterLab application directory is C:\Program Files\ArcGIS\Pro\bin\Python\envs\arcgispro-py3\share\jupyterlab
[I 07:53:08.430 NotebookApp] Serving notebooks from local directory: C:\Users\Lucas Elbert Suryana
[I 07:53:08.431 NotebookApp] The Jupyter Notebook is running at:
[I 07:53:08.436 NotebookApp] http://localhost:8889/?token=f8ca14f35fda158184a931e483401c1cfa8ca0f468786fdc
[I 07:53:08.437 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 07:53:08.706 NotebookApp]

To access the notebook, open this file in a browser:
    file:///C:/Users/Lucas%20Elbert%20Suryana/AppData/Roaming/jupyter/runtime/nbserver-11144-open.html
Or copy and paste one of these URLs:
    http://localhost:8889/?token=f8ca14f35fda158184a931e483401c1cfa8ca0f468786fdc
```