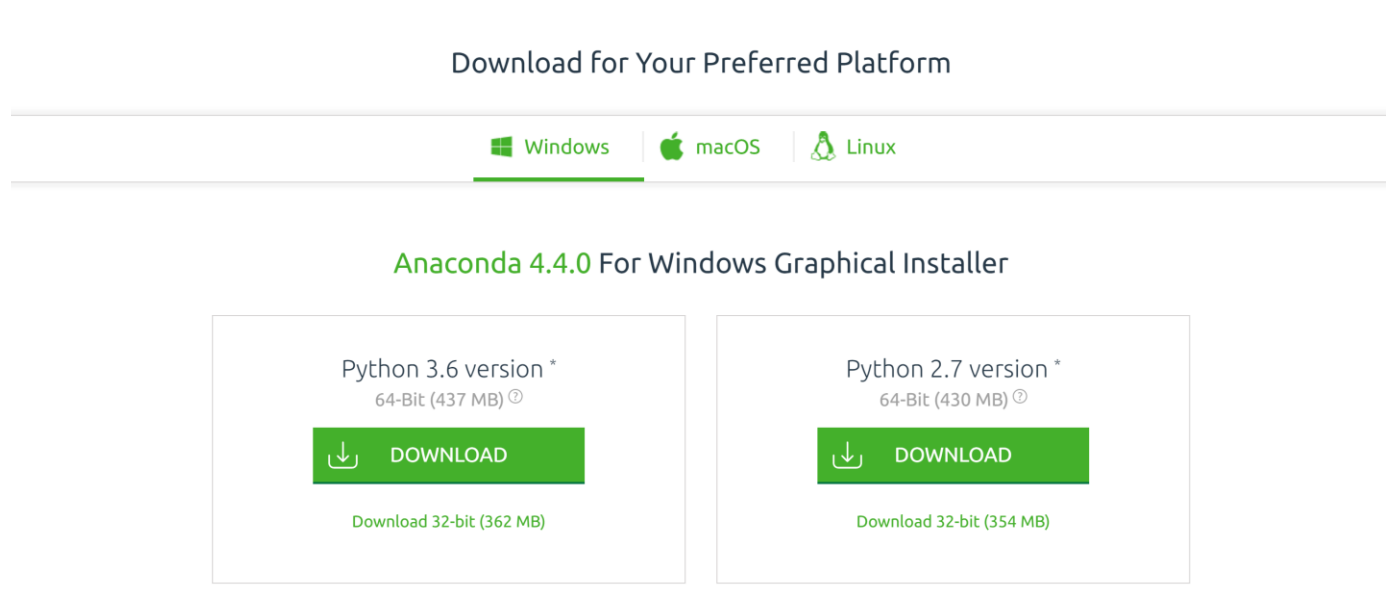


# Required Installation

- Programming Language: Python
- Imaging Library: OpenCV (Open Source Computer Vision Library)

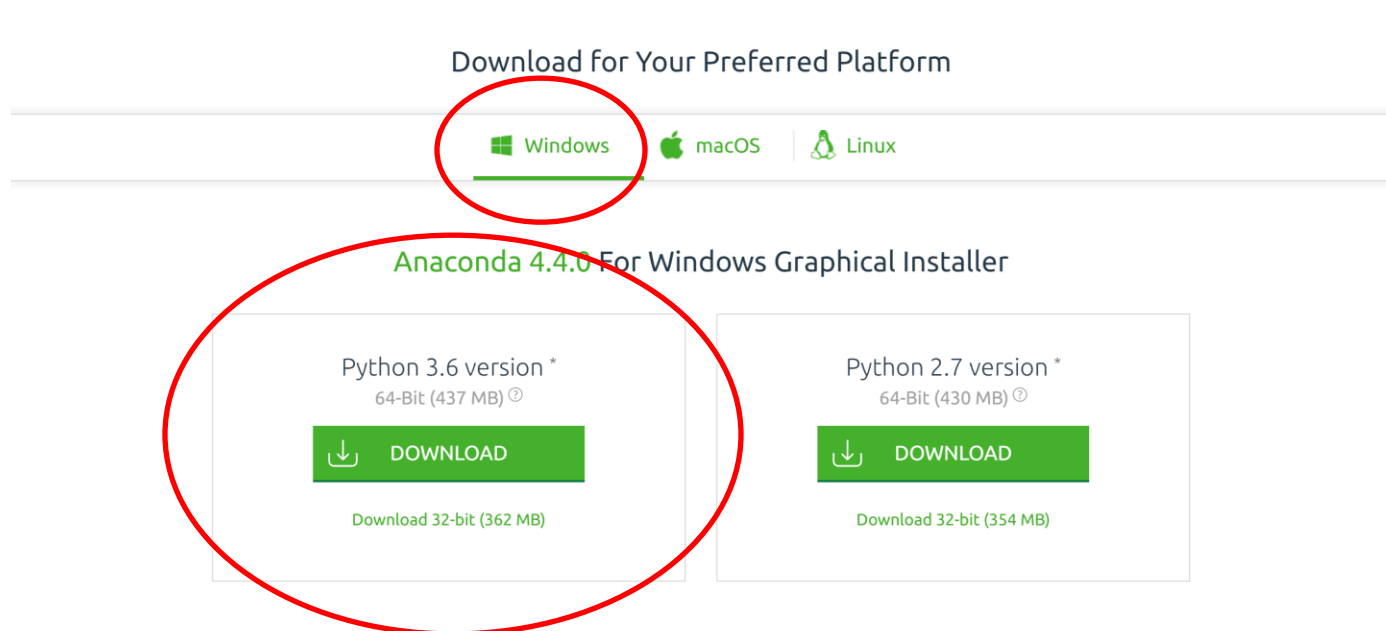
# Step 1: Install Anaconda

- <https://www.continuum.io/downloads>



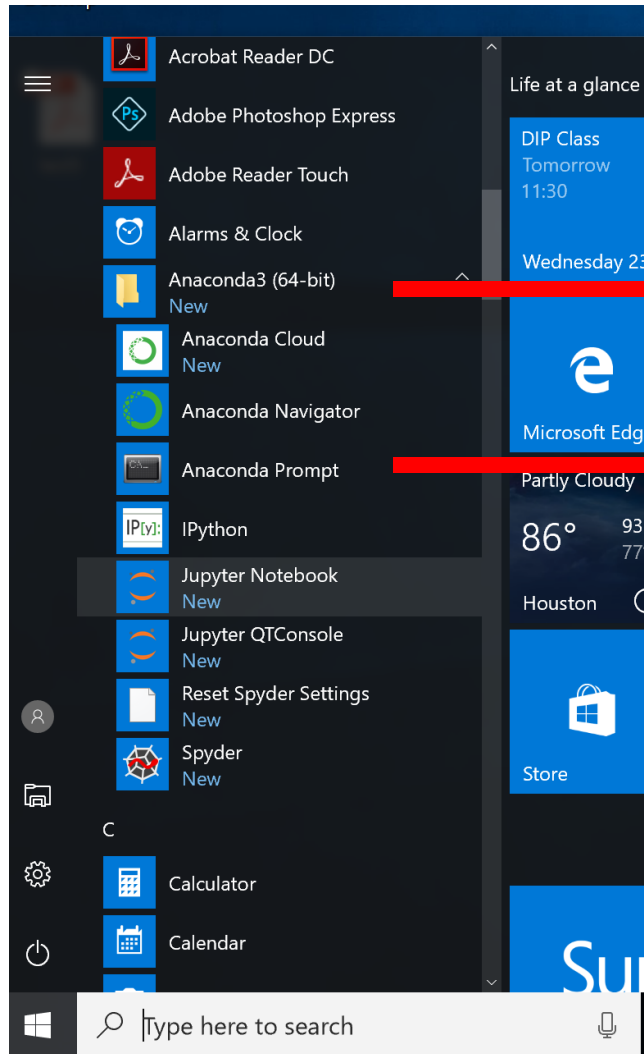
# Step 1: Install Anaconda

- <https://www.continuum.io/downloads>



- Run & install: Anaconda3-4.4.0-Windows-x86\_64.exe

# Step 2: Downgrade Python to 3.5



Open Anaconda Folder

Open Anaconda Prompt

# Step 2: Downgrade Python to 3.5

- Run Command

>Conda install python=3.5

```
(C:\Users\m_pra\Anaconda3) C:\Users\m_pra>conda install python=3.5
Fetching package metadata .....
Solving package specifications: .

Package plan for installation in environment C:\Users\m_pra\Anaconda3:

The following NEW packages will be INSTALLED:

  bkcharts:                0.2-py35_0
  pycodestyle:             2.3.1-py35_0
  sphinxcontrib:           1.0-py35_0
  sphinxcontrib-websupport: 1.0.1-py35_0

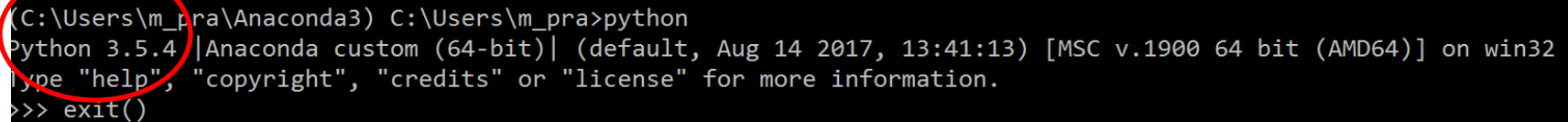
The following packages will be UPDATED:
```

# Step 2: Downgrade Python to 3.5

- Check your installation
- Run command

>python

Make Sure the version is 3.5  
and not 3.6



```
(C:\Users\m_pra\Anaconda3) C:\Users\m_pra>python
Python 3.5.4 [Anaconda custom (64-bit)] (default, Aug 14 2017, 13:41:13) [MSC v.1900 64 bit (AMD64)] on win32
type "help", "copyright", "credits" or "license" for more information.
>>> exit()
```

To exit python prompt Run

>>>exit()

# Step 3: Install OpenCV

- Run command

>conda install -c menpo opencv3

```
(C:\Users\m_pra\Anaconda3) C:\Users\m_pra>conda install -c menpo opencv3
Fetching package metadata .....
Solving package specifications: .

Package plan for installation in environment C:\Users\m_pra\Anaconda3:

The following NEW packages will be INSTALLED:

  opencv3: 3.1.0-py35_0  menpo

Proceed ([y]/n)? y
```

# Step 3: Install OpenCV

- Check your installation
- Enter python prompt again(run command)

>python

- In python prompt run

>>>import cv2

>>>cv2.\_\_version\_\_

```
(C:\Users\m_pra\Anaconda3) C:\Users\m_pra>python
Python 3.5.4 |Anaconda custom (64-bit)| (default, Aug 14 2017, 13:41:13) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import cv2
>>> cv2.__version__
'3.1.0'
>>>
```



# Step 4: Install Python IDE

- Numerous options.
  - Atom
  - Geany
  - PyDev(Eclipse)
  - PyCharm

# Step 4: Install PyCharm

- <https://www.jetbrains.com/pycharm/download/#section=windows>
- Install Community version (Free to use)

## Download PyCharm

Windows

macOS

Linux

### Professional

Full-featured IDE  
for Python & Web  
development

DOWNLOAD

Free trial

### Community

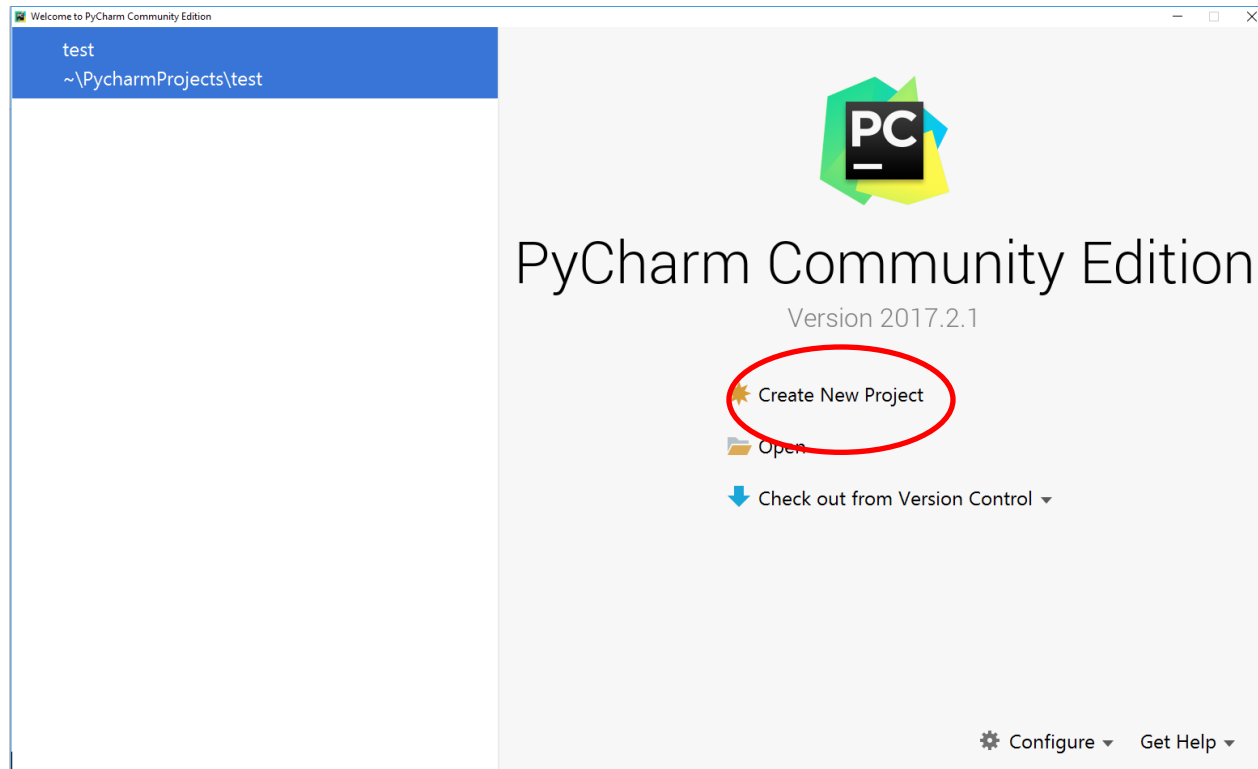
Lightweight IDE  
for Python & Scientific  
development

DOWNLOAD

Free, open-source

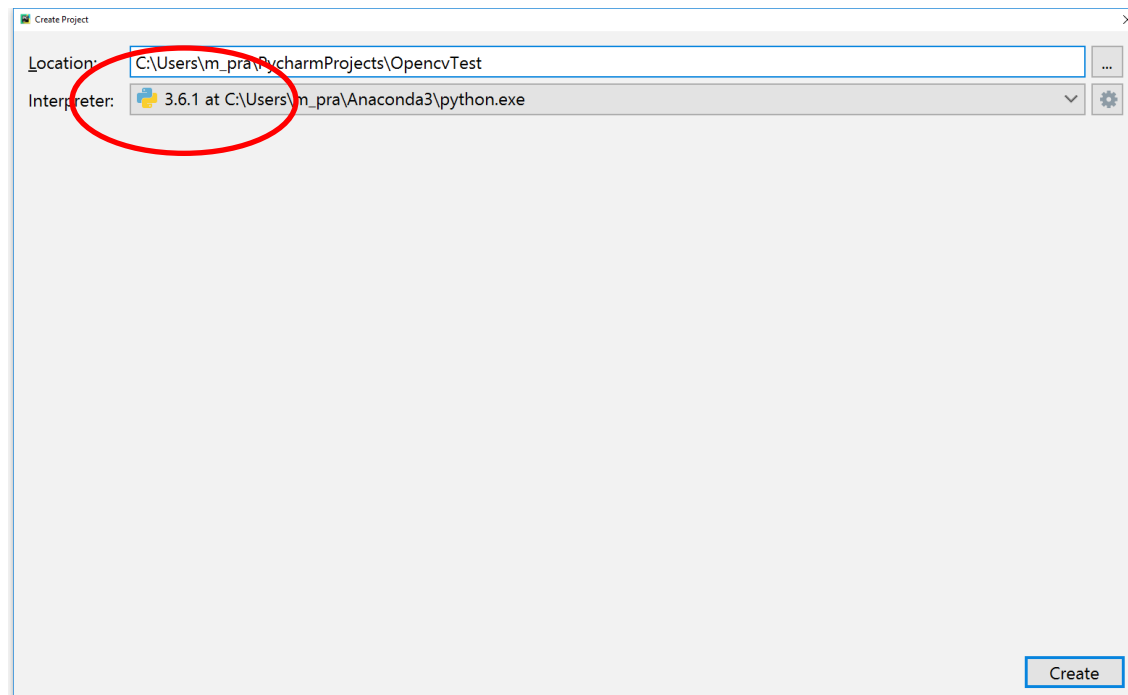
# Step 5: Setup PyCharm and OpenCV

- Start PyCharm
- Create New Project



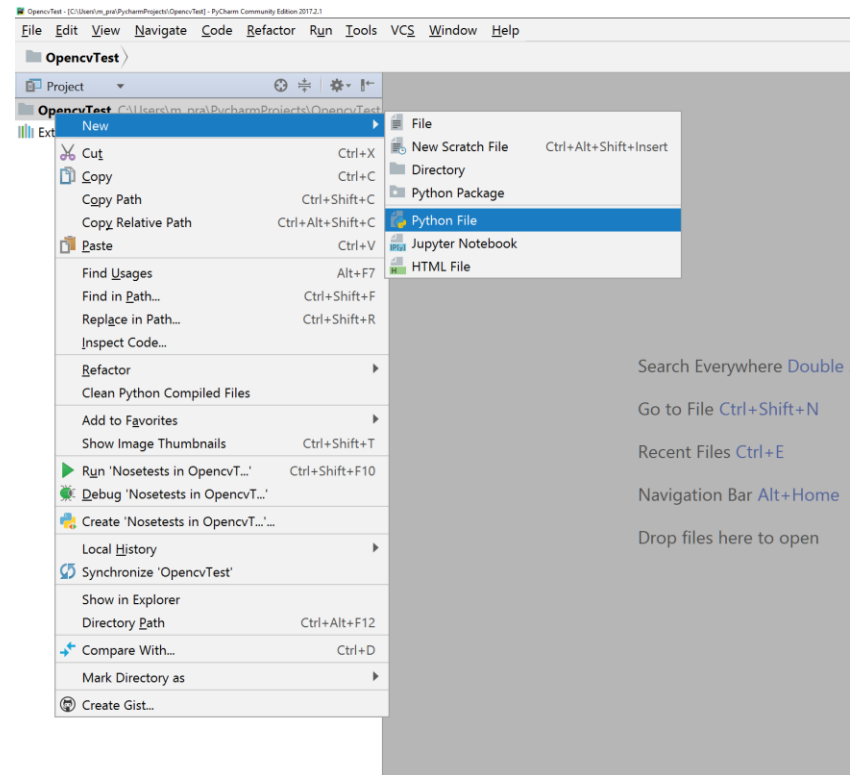
# Step 5: Setup PyCharm and OpenCV

- Select Interpreter: Select the one that has Anaconda in it.
- Note: It might display 3.6.1, but ignore it



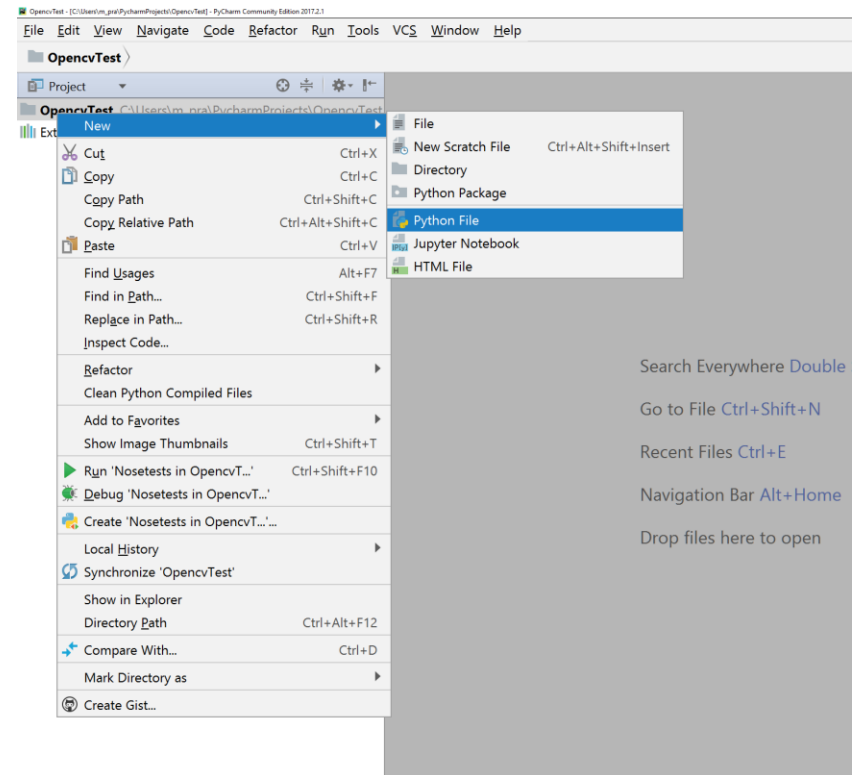
# Step 5: Setup PyCharm and OpenCV

- Right click on the project and open a new python file.
- Note PyCharm may take some to index files (will appear in the lower right corner in IDE). Let it run through.



# Step 5: Setup PyCharm and OpenCV

- Right click on the project and open a new python file.



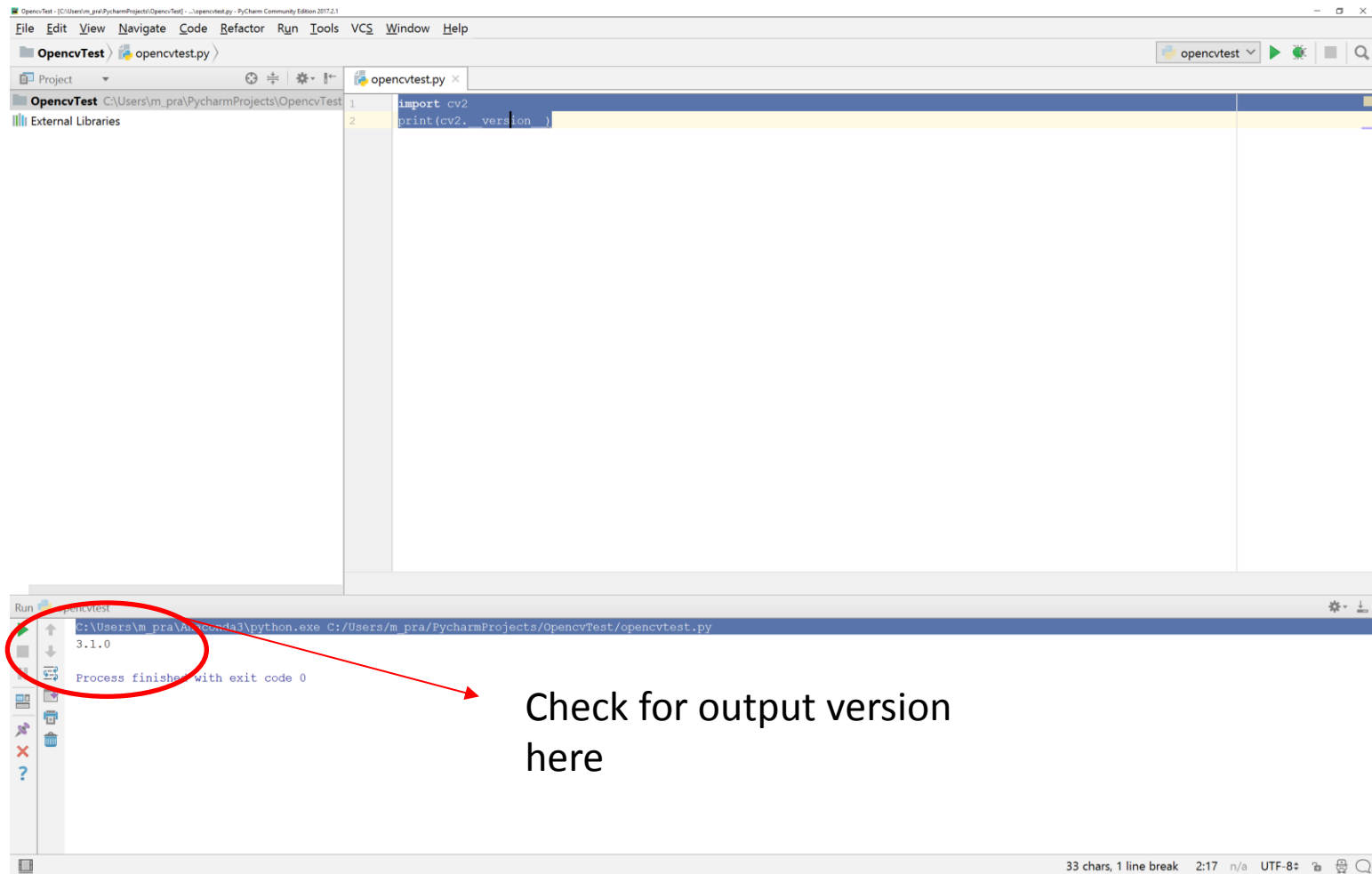
# Step 5: Setup PyCharm and OpenCV

- Type in code

```
import cv2  
print(cv2.__version__)
```

- Go to run> Run

# Step 5: Setup PyCharm and OpenCV





# Troubleshooting

- If you get an error like

*Traceback (most recent call last):*

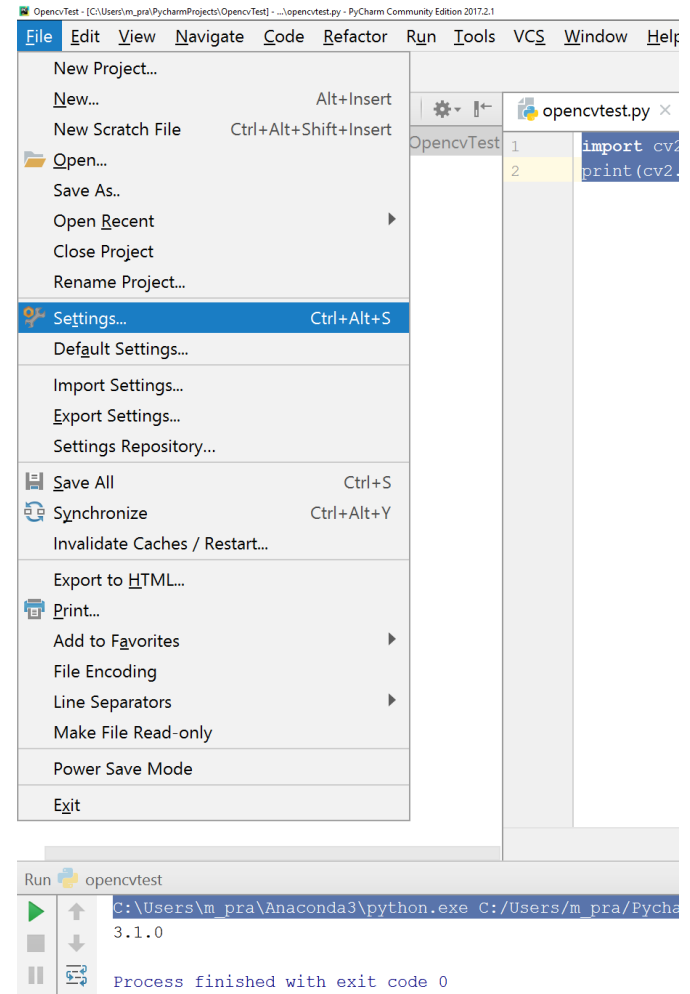
*File "<stdin>", line 1, in <module>*

*ImportError: No module named 'cv2'*

- Your OpenCV is not loaded by pycharm

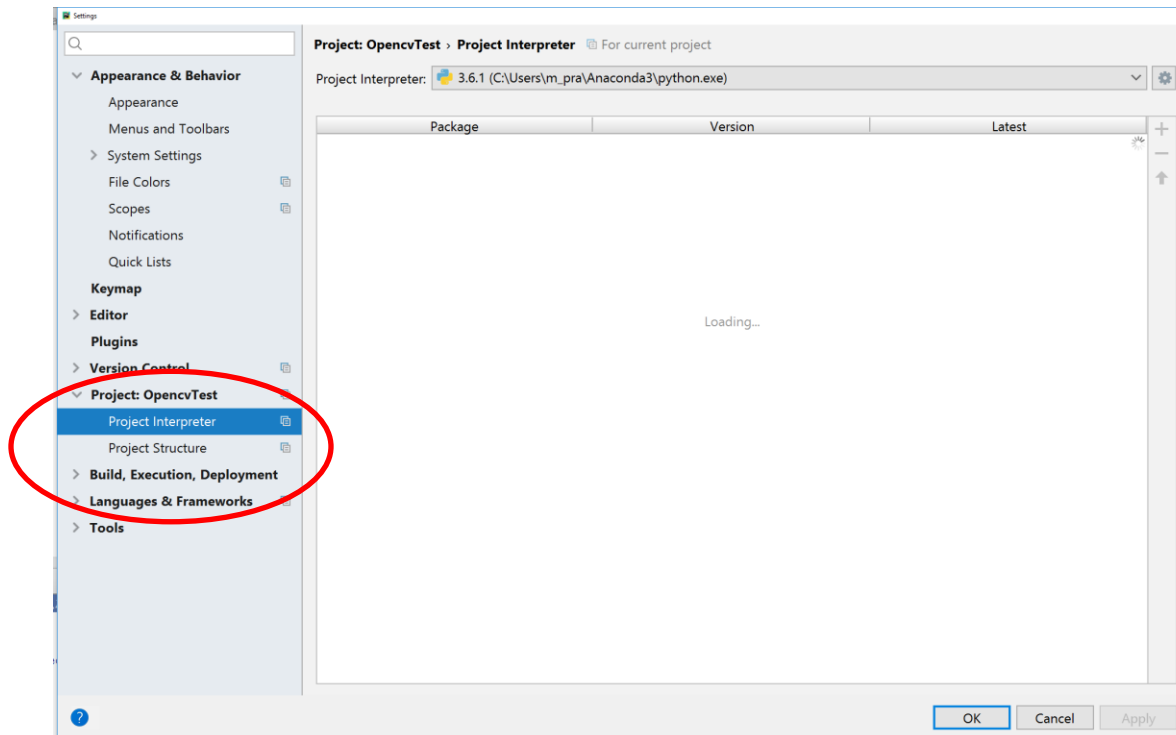
# Troubleshooting

- Go to File > Settings



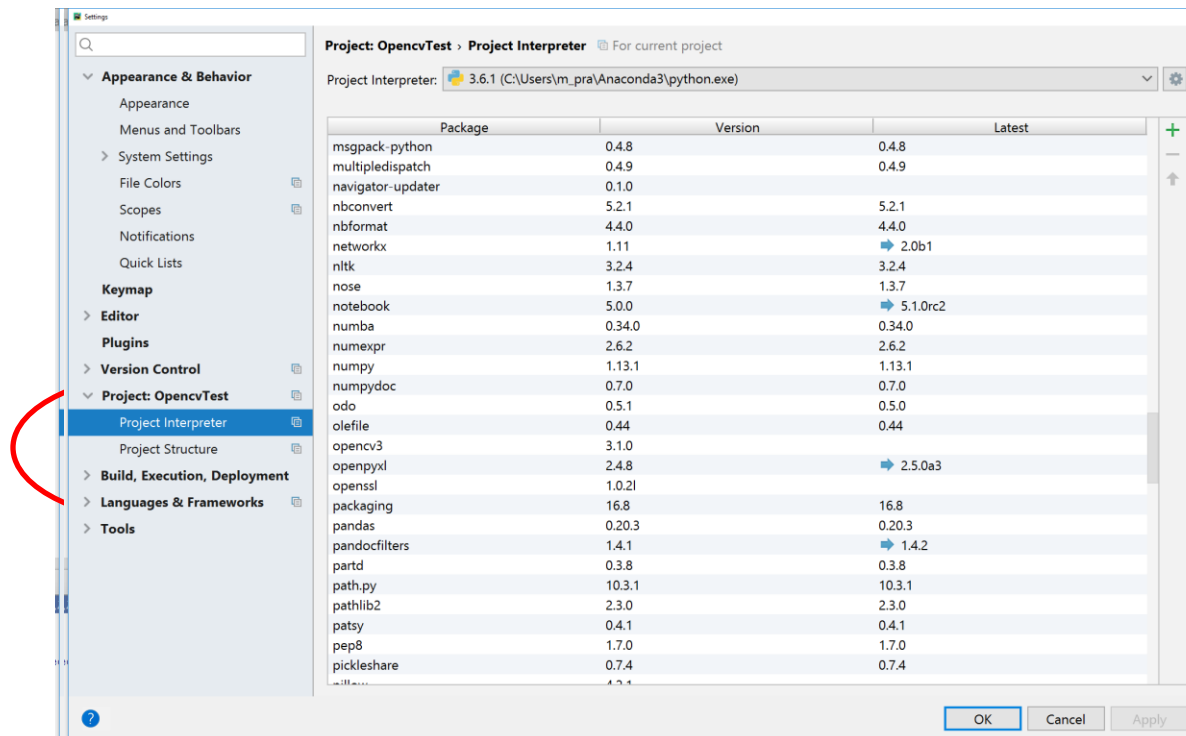
# Troubleshooting

- Go to  
Project : <your project name > project interpreter



# Troubleshooting

- Choose package (double click) opencv3  
→ install package



Try running your file  
again