

API

Special thanks to Dohyeon Koo.
* This note was created by Dohyeon Koo.

OUTLINE

1. Install Anaconda3
2. Visual Studio Code
3. Register Open API & Test investment competition
4. Set Open API & KOAstudio

1. Install Anaconda 3

1) Anaconda download.

o go to anaconda (<https://www.anaconda.com/download/>)

Recommendation: python 3.7 & 32-Bit.



Figure 1

2) Install Anaconda.

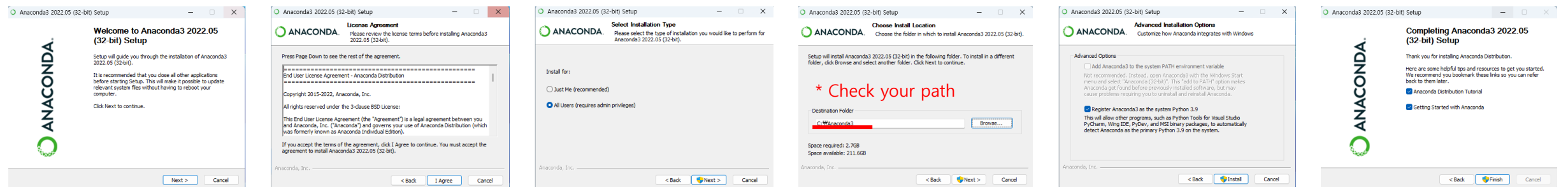


Figure 2

1. Install Anaconda 3

3) Run Anaconda prompt

a. Press Windows key+ S and type 'prompt'. Then you will see Figure 3. Click the Anaconda prompt.

b. To check if Anaconda is properly installed on your local machine, type "**conda -version**" on terminal (macOS) or prompt (Windows). **Figure 4**

c. To check the version of Anaconda, type "conda info".
If the output is "win-64", you need to switch to "win-32".

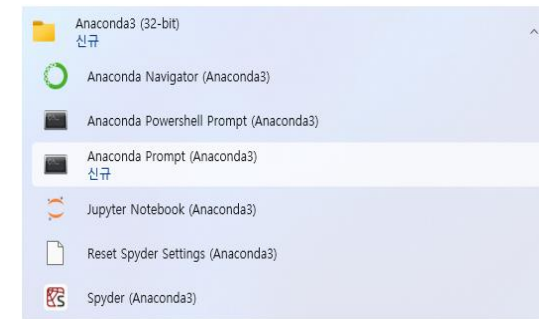


Figure 3

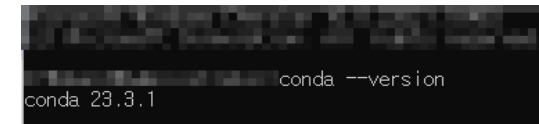


Figure 4



Figure 5

1. Install Anaconda3

* If your anaconda is "win-32", you can skip this page.

3-1) Changing from win-64 to win-32

Korean financial institutions provide Open APIs exclusively in a Windows 32-bit environment. Therefore, you need to modify "win-64" to "win-32"

- a.** Type "set CONDA_FORCE_32BIT=1" in the prompt (Window) or terminal (macOS).

```
➜ set CONDA_FORCE_32BIT=1
```

Figure 6

- b.** Type "conda info" to check the Windows bit version again.

```
platform : win-32
```

Figure 7

1. Install Anaconda3

4) Create environment

- a. Create environment. In my case, I create my environment as 'py38_32'

```
->conda create -n py38_32 python=3.8
```

Figure 8

It is possible type any name such like DH ,Kim....

- b. Type 'y' for creating your environment.

```
The following packages will be downloaded:
```

package	build	
certifi-2021.10.8	py38h9f7ea03_0	151 KB
pip-21.2.4	py38h9f7ea03_0	1.8 MB
python-3.8.12	h53c7b84_0	15.3 MB
setuptools-58.0.4	py38h9f7ea03_0	792 KB
wincertstore-0.2	py38h9f7ea03_2	15 KB
Total:		18.1 MB

```
The following NEW packages will be INSTALLED:
```

ca-certificates	pkgs/main/win-32::ca-certificates-2021.10.26-h9f7ea03_2
certifi	pkgs/main/win-32::certifi-2021.10.8-py38h9f7ea03_0
openssl	pkgs/main/win-32::openssl-1.1.1h-c431981_0
pip	pkgs/main/win-32::pip-21.2.4-py38h9f7ea03_0
python	pkgs/main/win-32::python-3.8.12-h53c7b84_0
setuptools	pkgs/main/win-32::setuptools-58.0.4-py38h9f7ea03_0
sqlite	pkgs/main/win-32::sqlite-3.36.0-hc431981_0
vc	pkgs/main/win-32::vc-14.2-h21ff451_1
vs2015_runtime	pkgs/main/win-32::vs2015_runtime-14.27.29016-h5e58377_2
wheel	pkgs/main/noarch::wheel-0.37.0-pyhd3eb1b0_1
wincertstore	pkgs/main/win-32::wincertstore-0.2-py38h9f7ea03_2

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

Figure 9

1. Install Anaconda3

4) Install Modules for API

- a. Activate your environment by typing "conda activate `your environment name`": (For example, py38_32)

A terminal window showing the command `conda activate py38_32` being entered. A red arrow points from the command to the resulting prompt `(py38_32)` in a subsequent terminal window.

Figure 10

- b. Install pandas, PyQt5, matplotlib, and pykiwoom

A terminal window showing the command `pip install pandas PyQt5 matplotlib` being entered within the `(py38_32)` environment.

Figure 11

- c. Install pywin32 by using the command "conda install" (Use "conda" instead of "pip")

A terminal window showing the command `conda install pywin32` being entered within the `(py38_32)` environment.

Figure 12

2. Visual Studio code

* If you have already installed VScode you can skip this chapter

1) Download Vscode

o go to Vscode (<https://code.visualstudio.com/>)

2) Install VScode

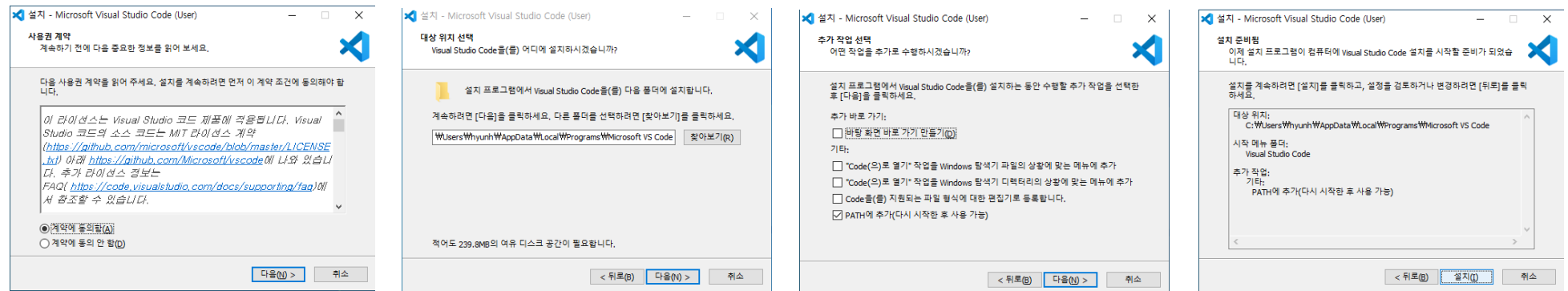
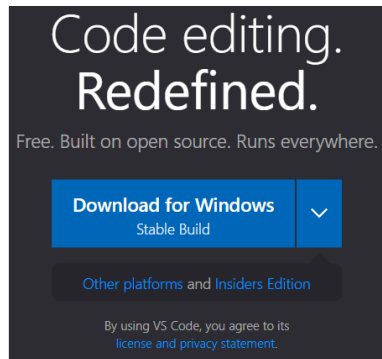


Figure 13

2. Visual Studio code

3) Run VSCode.

- a. Open folder and click New file (click red box)

4) Set python interpreter

- connect your terminal (macOS) and prompt (Windows) with VSCode.

Follow the sequence indicated by the red box.

Click interpreter that matches your environment name.

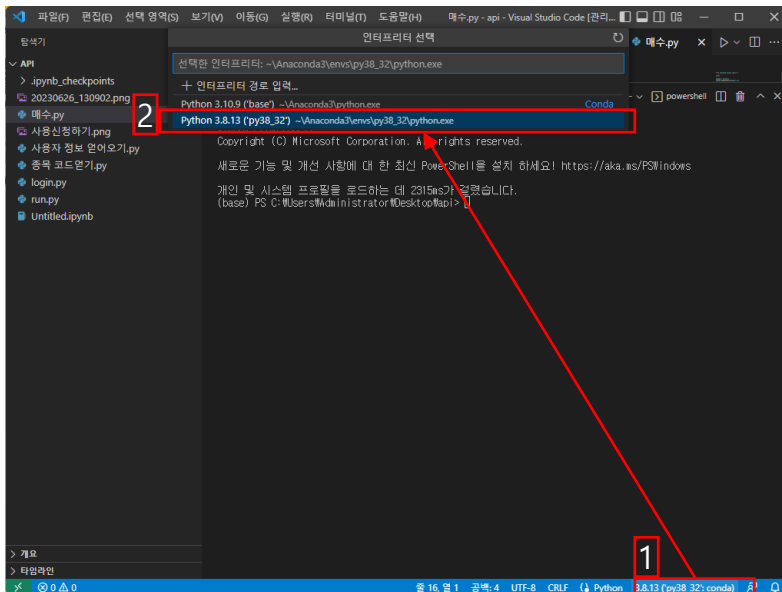


Figure 15

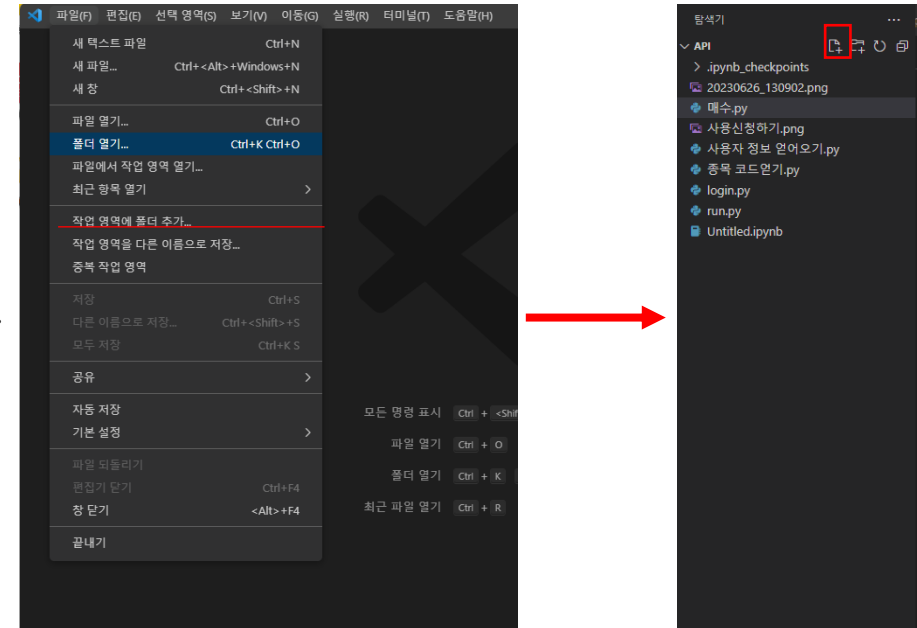


Figure 14

3. Open API

* You need to register a Kiwoom account (Kiwoom securities)

1) Register Open API

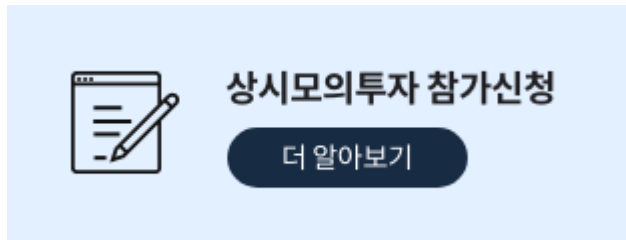
a. Click on "Open API" at the bottom of the KIWOOM securities website. See Figure 16.

b. Click "사용 신청하러 가기".

c. Click "키움 Open API + 모듈 다운로드".

d. Download "KOA Studio 다운로드".

e. Click "상시 모의투자 신청하러 가기 "



공지사항	더보기 >	서비스안내	트레이딩채널
· 본인계좌 일괄지급정지 서비스 2단계 확대 ...	07/04	업무시간 >	홈트레이딩시스템(HTS)
· 신규 상장종목 상장일 미수거래 제한 안내	06/28	수수료/증거금 >	스마트폰
· 한국거래소 신규상장일 가격 결정방법 및 ...	06/23	장애인 홈페이지 이용안내	테블릿
· 불공정거래 모니터링 유형 신설(증가집중...	06/22	고객게시판	Open API
· [해외선물음션] 7월 휴장일 안내	06/21	자주하는질문(FAQ) >	ARS서비스

Figure 16

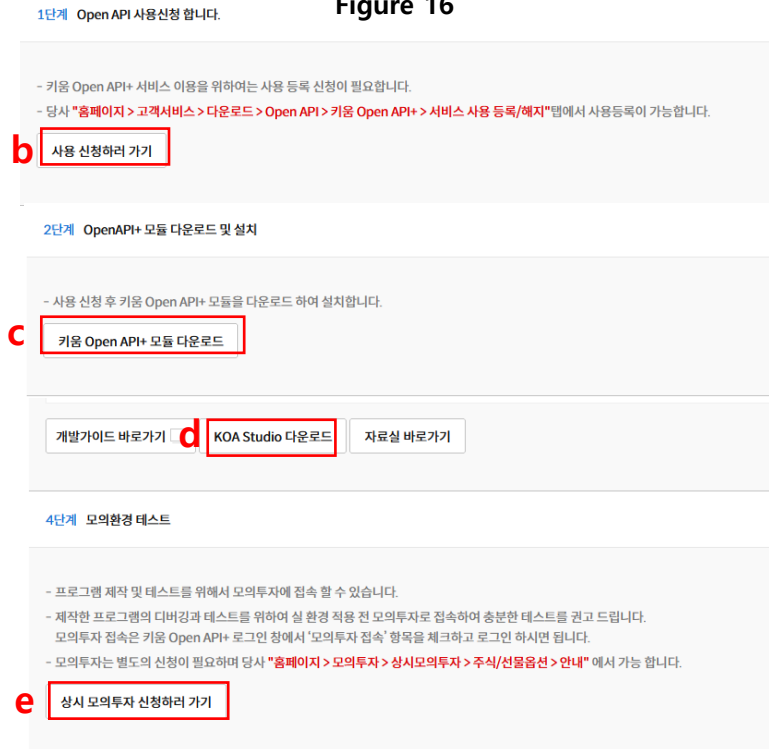


Figure 17

4. Set Open API & KOA studio

- 1) Move KOA studio to the Open API folder.

- a.** Copy the files KOAstudioSA.exe & KOAloader.dll and paste them to the OpenAPI folder (the specific path depends on where you downloaded the files.)

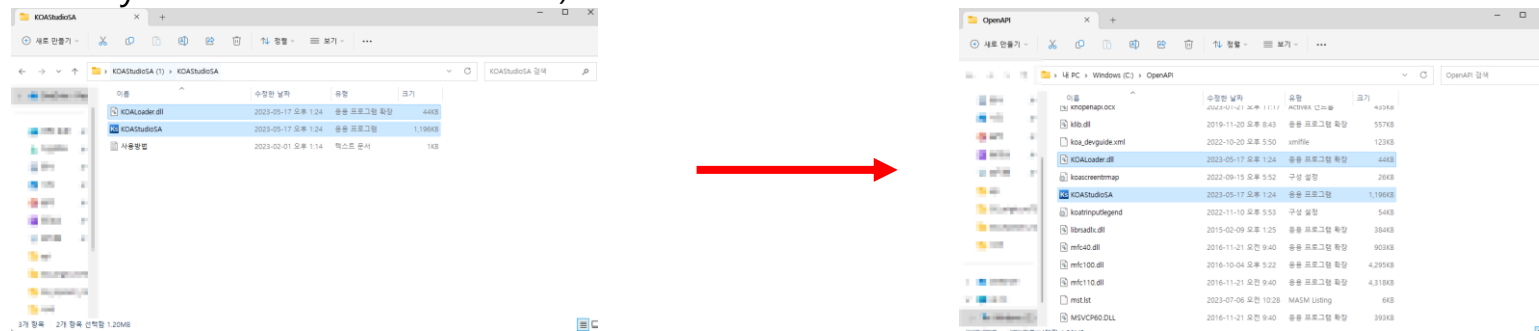


Figure 18

b. Run KOAStudioSA (Click the red box) and log in to the API (Click the red box)

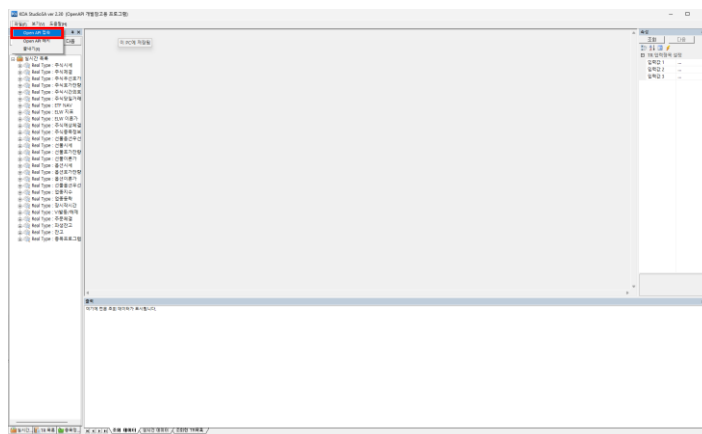


Figure 19



Figure 20