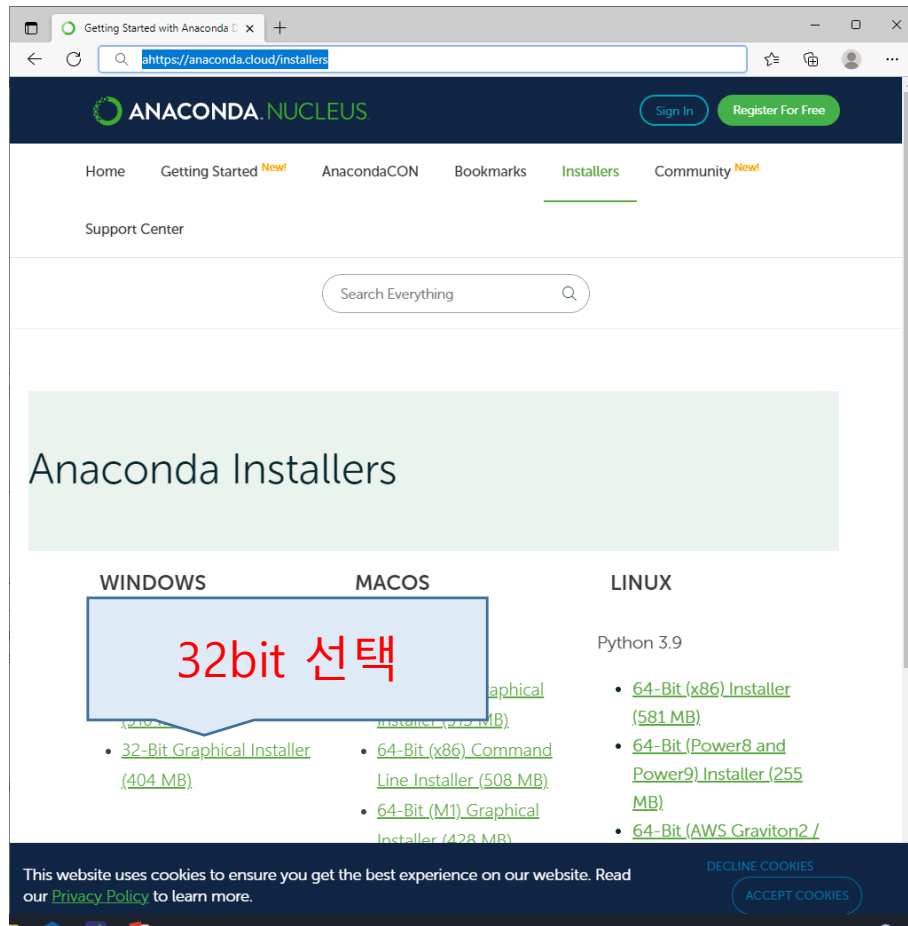
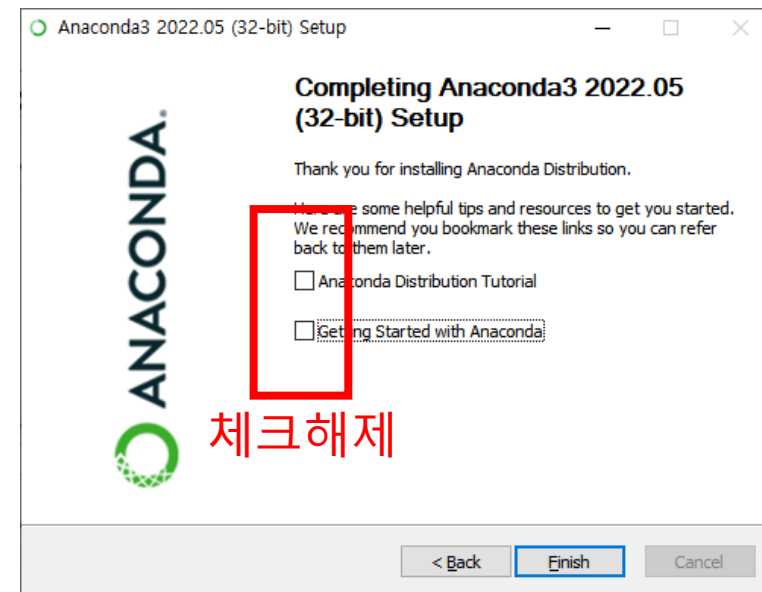
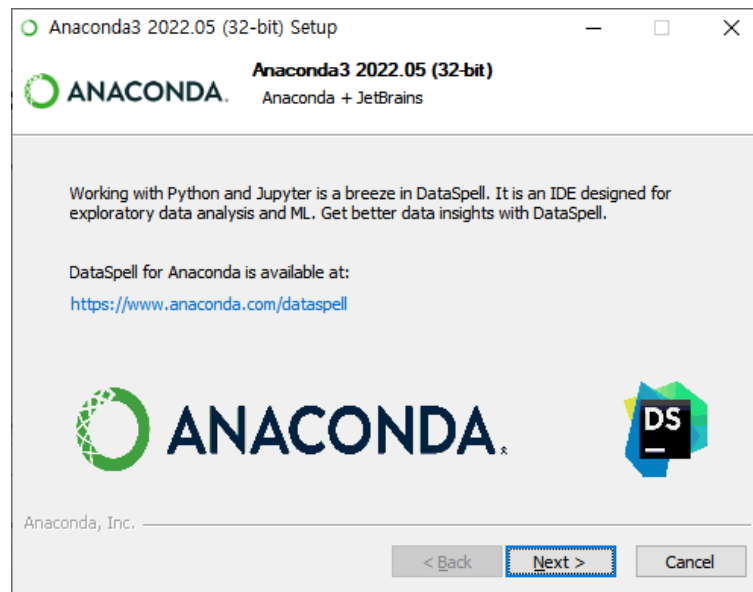
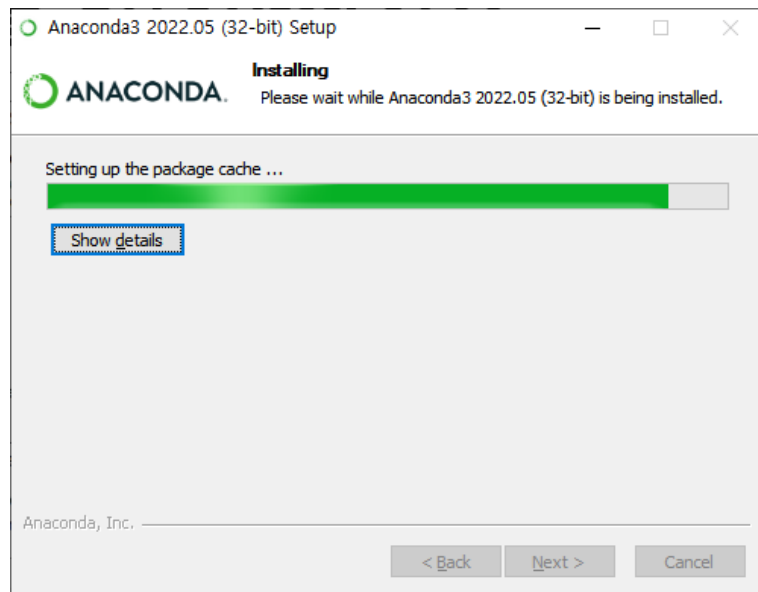
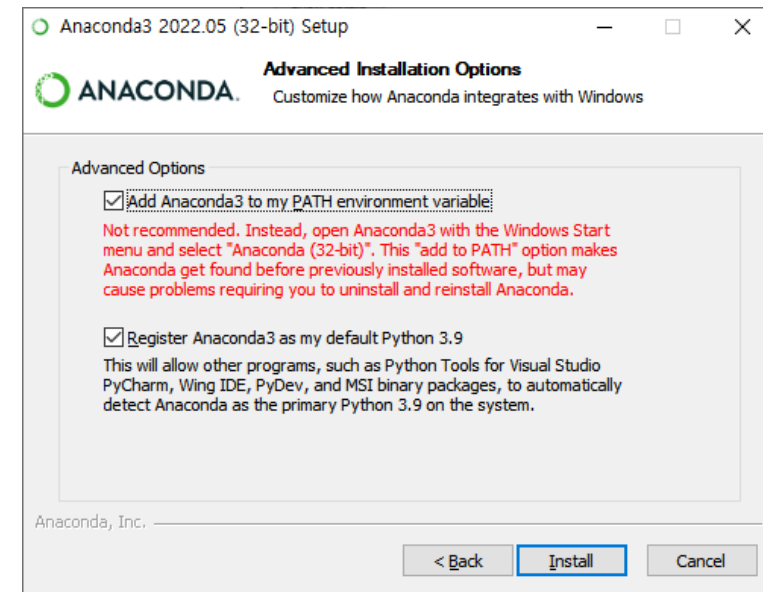
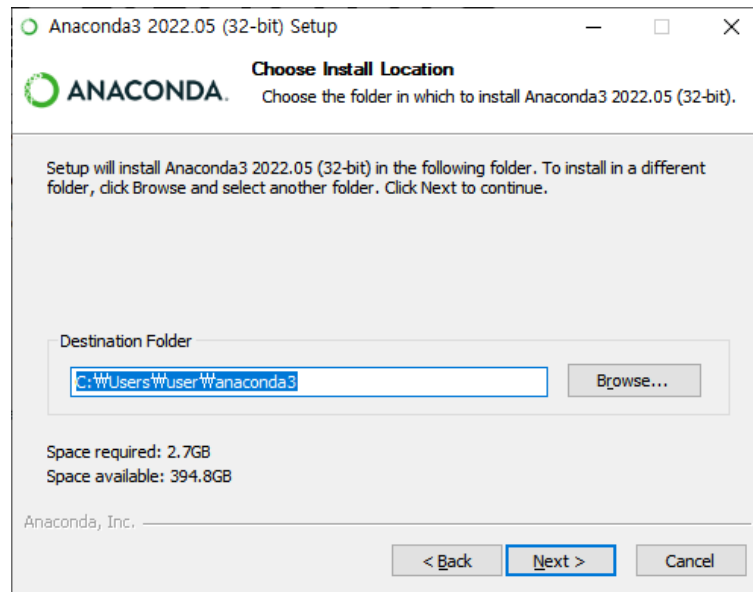
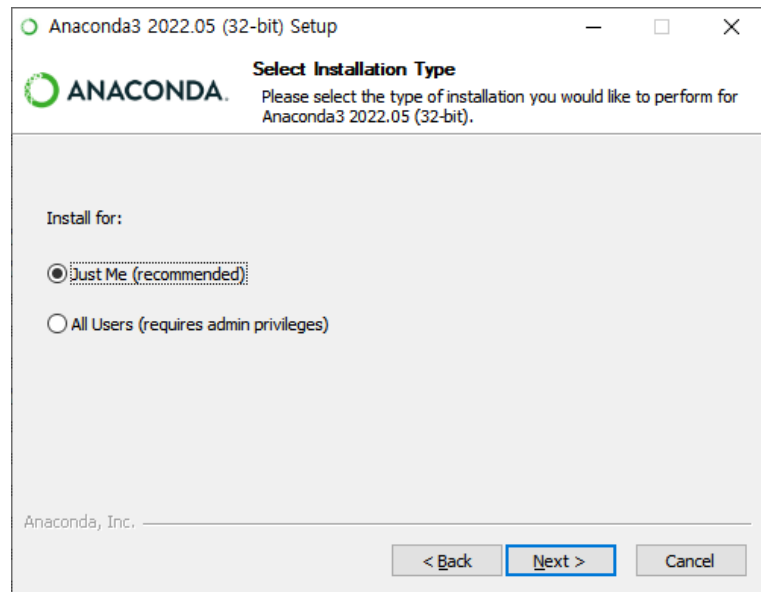


# 자동매매주식 시스템

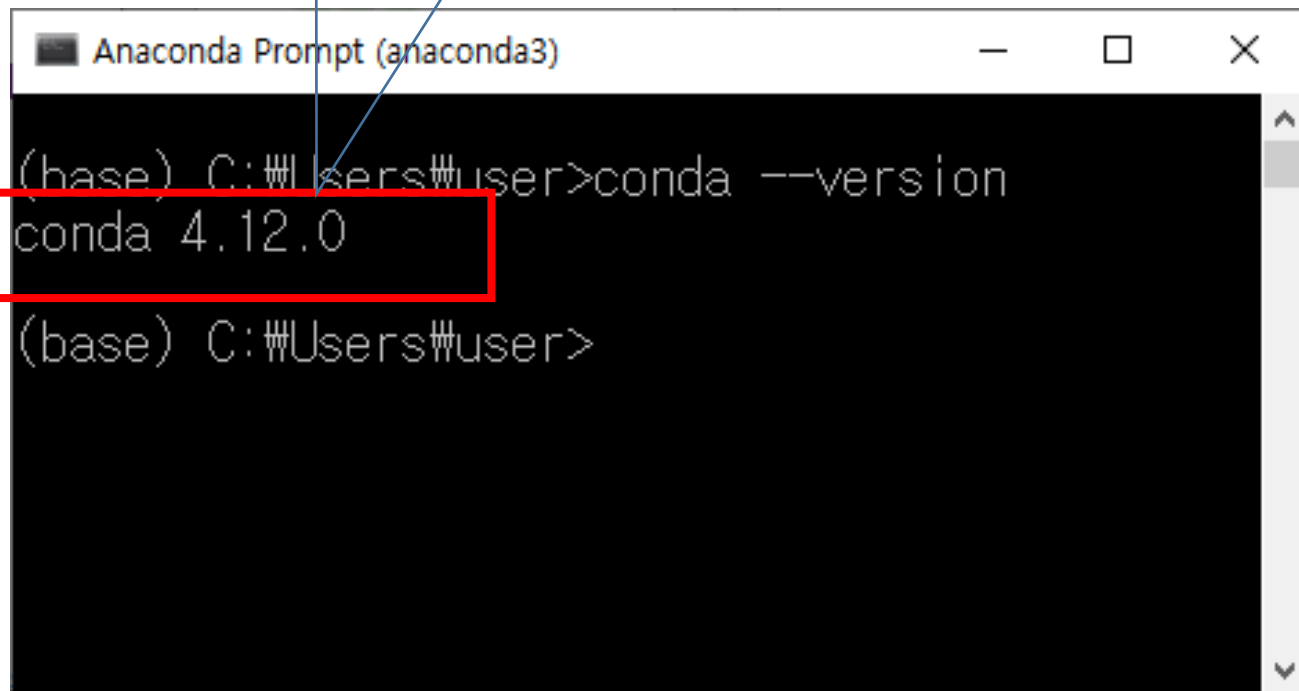
# 실행환경 : 아나콘다설치

- 아나콘다 다운 : <https://anaconda.cloud/installers>





아나콘다 설치 시점에 따라  
버전이 다를수 있음



```
Anaconda Prompt (anaconda3)
(base) C:\Users\user>conda --version
conda 4.12.0
(base) C:\Users\user>
```

1. 시작메뉴에서  
Anaconda Prompt(anaconda3) 실행
2. Conda -- version 입력 후 엔터  
버전확인

# 아나콘다 가상 환경 설정하기(1)

선택 Anaconda Prompt (anaconda3) - conda create -n system\_trading\_py38\_32 python=3.8

```
(base) C:\Users\user>conda create -n system_trading_py38_32 python=3.8
Collecting package metadata (current_repodata.json): done
Solving environment: done
```

Total: 24.2 MB

The following NEW packages will be INSTALLED:

ca-certificates	pkgs/main/win-32::ca-certificates-2022.4.26-h9f7ea03_0
certifi	pkgs/main/win-32::certifi-2022.6.15-py38h9f7ea03_0
openssl	pkgs/main/win-32::openssl-1.1.1o-hc431981_0
pip	pkgs/main/win-32::pip-21.2.4-py38h9f7ea03_0
python	pkgs/main/win-32::python-3.8.13-h53c7b84_0
setuptools	pkgs/main/win-32::setuptools-61.2.0-py38h9f7ea03_0
sqlite	pkgs/main/win-32::sqlite-3.38.3-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-0.37.1-pyhd3eb1b0_0
wincertstore	pkgs/main/win-32::wincertstore-0.2-py38h9f7ea03_2

Y

Proceed ([y]/n)?

# 아나콘다 가상 환경 설정하기(2)

```
Anaconda Prompt (anaconda3)

# To activate this environment, use
#
#     $ conda activate system_trading_py38_32
#
# To deactivate an active environment, use
#
#     $ conda deactivate

(base) C:\Users\User>conda env list
# conda environments:
#
base                * C:\Users\User\anaconda3
system_trading_py38_32  C:\Users\User\anaconda3\envs\system_trading_py38_32

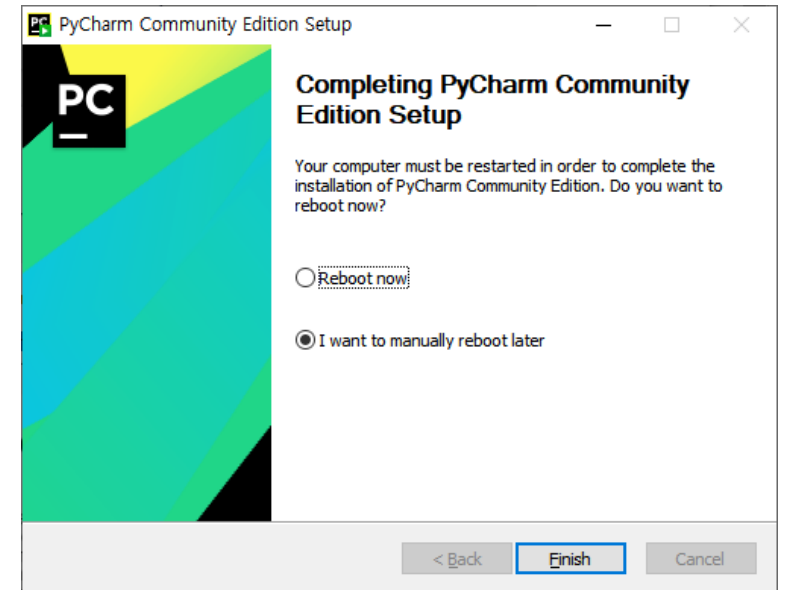
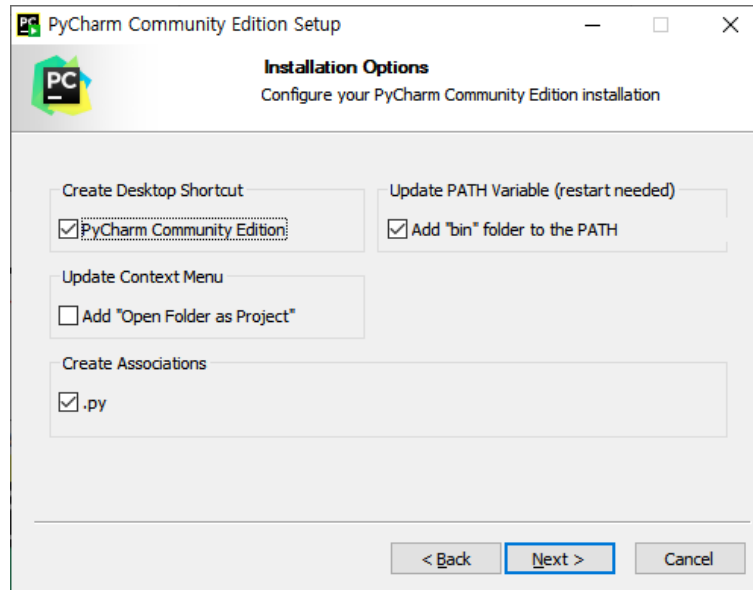
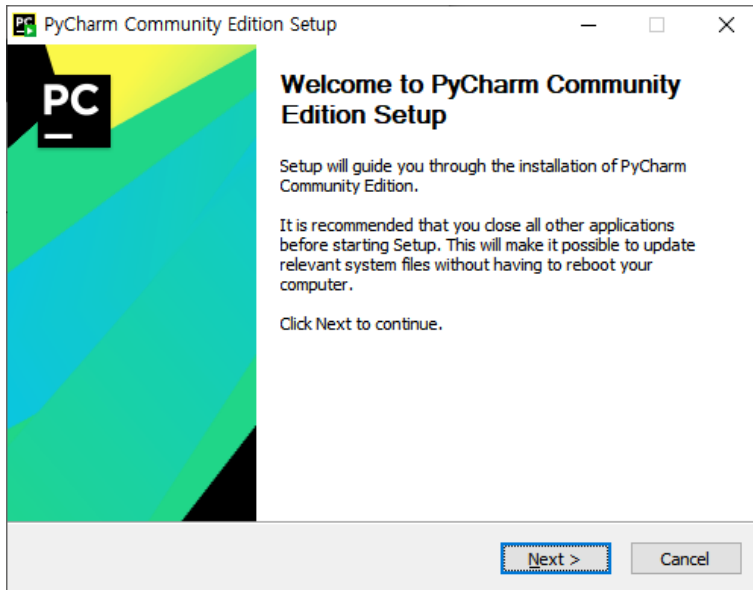
(base) C:\Users\User>
```

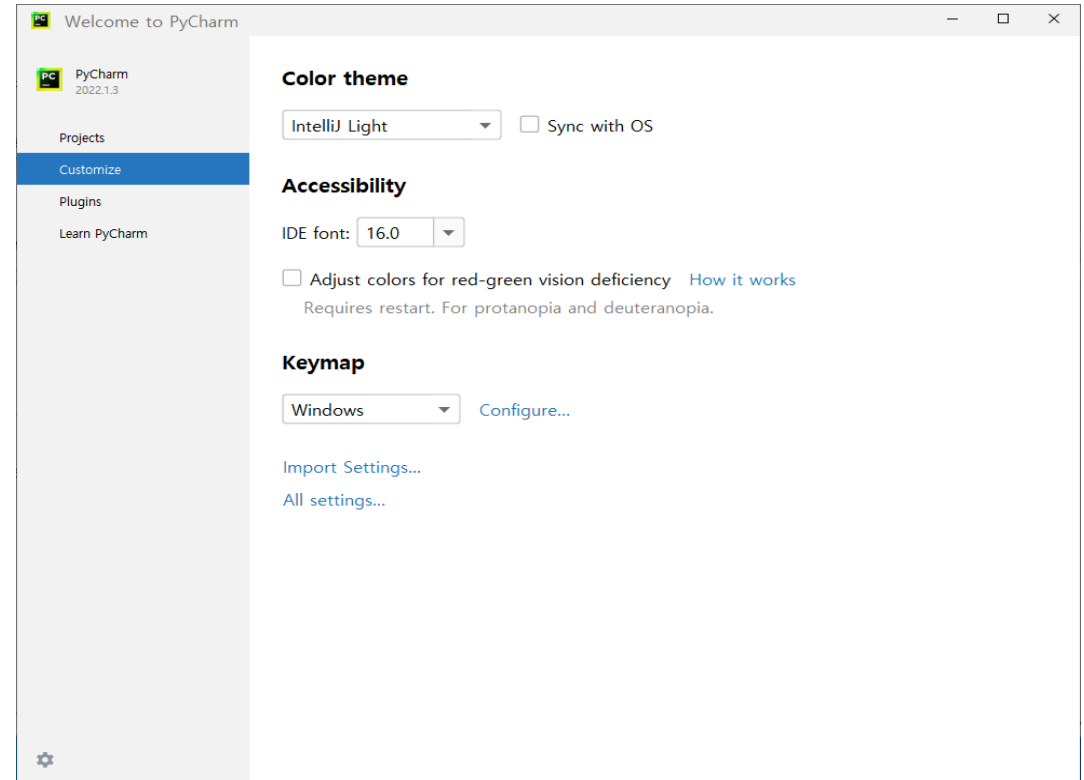
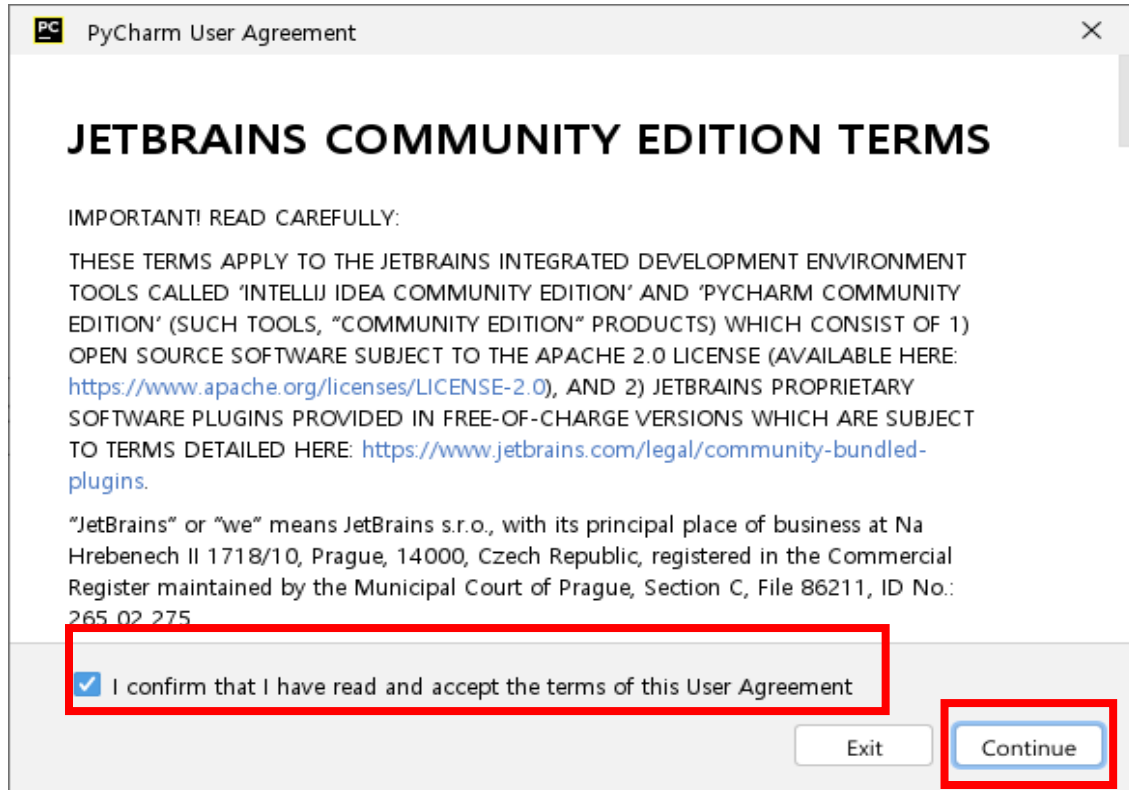
가상환경 설치 확인  
conda env list 입력

# 실행환경 : 파이참 설치



- 파이참 다운 : <https://www.jetbrains.com/pycharm/>

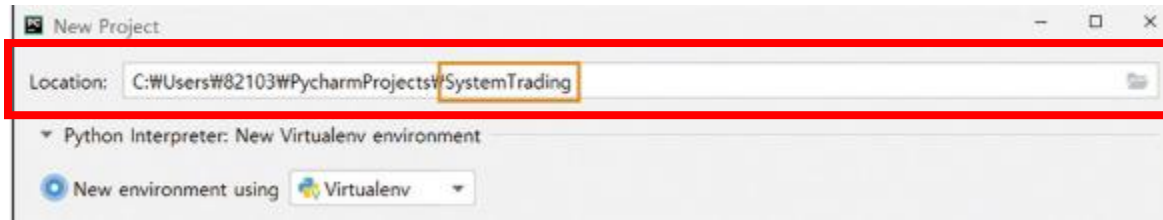




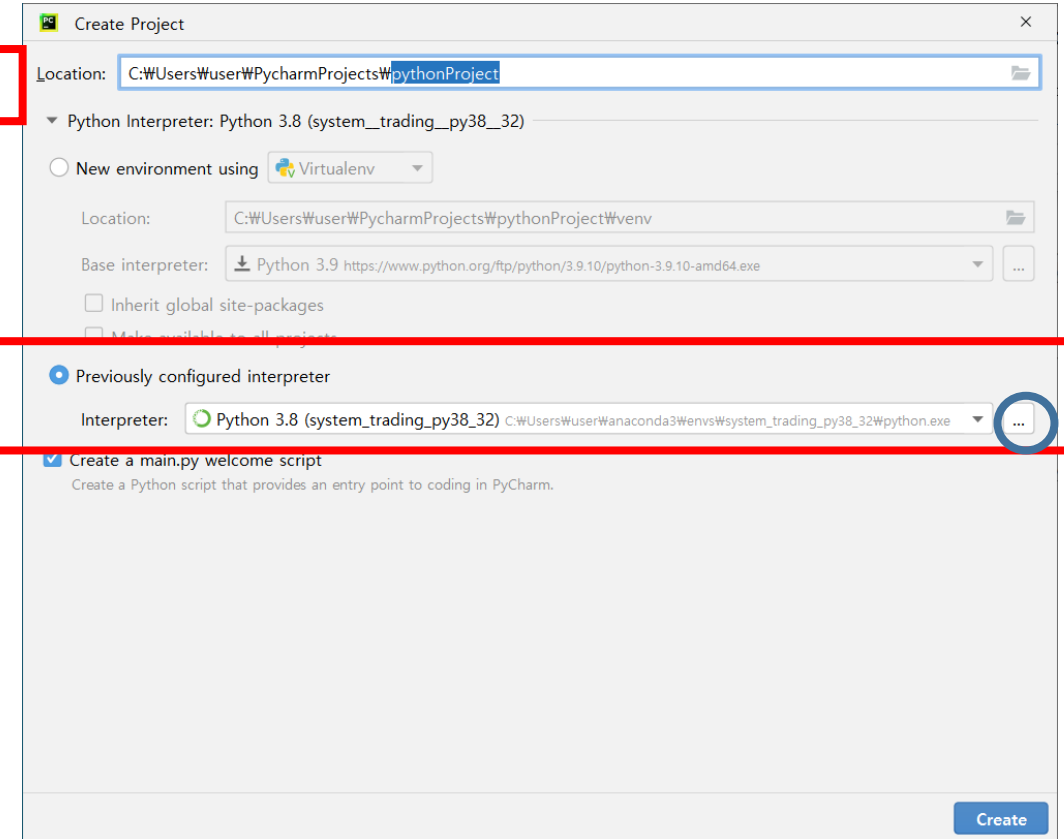
파이참 처음 실행시 테마 및 폰트등 조절가능



# 프로젝트 만들기



New Project에서 위 부분을 SytemTrading로 수정



# 알아야 하는 것들

- 파이썬 기초 문법
  - 변수, 제어문, 반복문
  - 함수, 리플, 튜플 등 집합형 자료
  - 클래스
  - 모듈과 패키지
  - 예외처리

Kiwoom API사용

# 환경구축

## ■ 키움증권 계좌만들기

- 인증서 발급받기

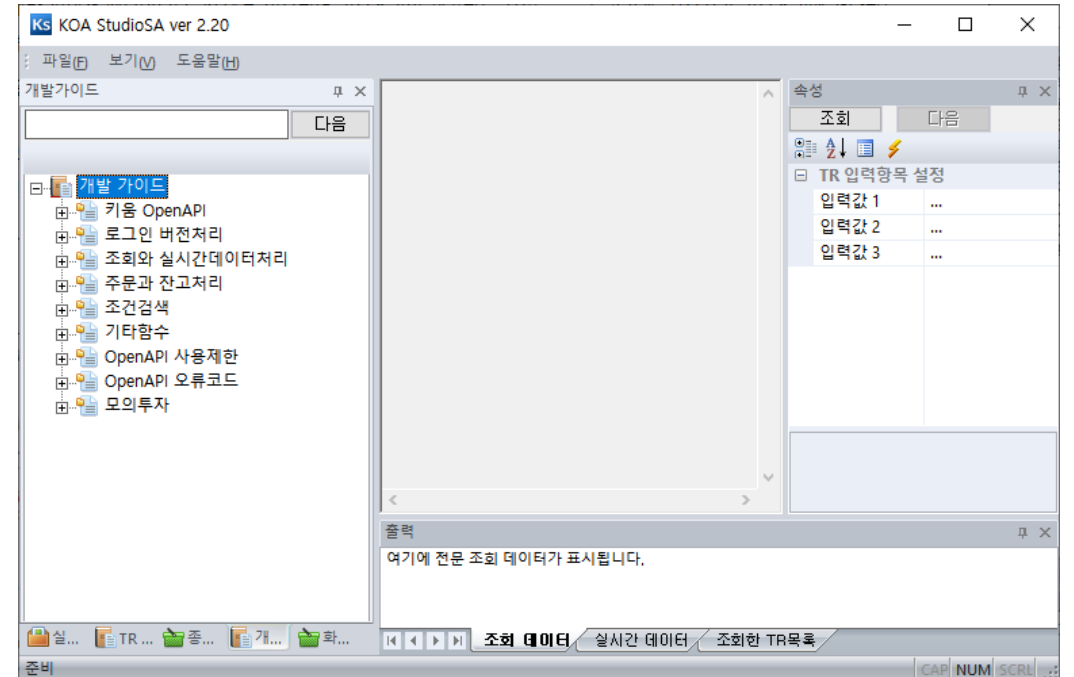
## ■ Open API내려받기

- 키움증권 웹사이트 하단 : 트레이딩채널 > Open API 선택
- 사용 신청하러 가기 선택



# KOA Studio설치

## ■ KOA Studio 내려받기



# 상시 모의 투자 참가신청

상시 모의투자 | 주식/선물옵션 | x +

www1.kiwoom.com/h/mock/ordinary/VMockTotalMHOMEView?Pgar4=7H8GQA8BjdtVtXg5kQ5BZXAA80LwxdtatSxNUO...

대한민국 주식시장 점유율 17년 연속 1위

모의투자홈 상시모의투자 대학그룹모의투자 일반그룹모의투자 공지사항/Q&A

상시모의투자 참가신청  
더 알아보기

대학그룹 참가신청  
더 알아보기

모의투자 수익률 전당 모의투자 실황 더보기 >

모의투

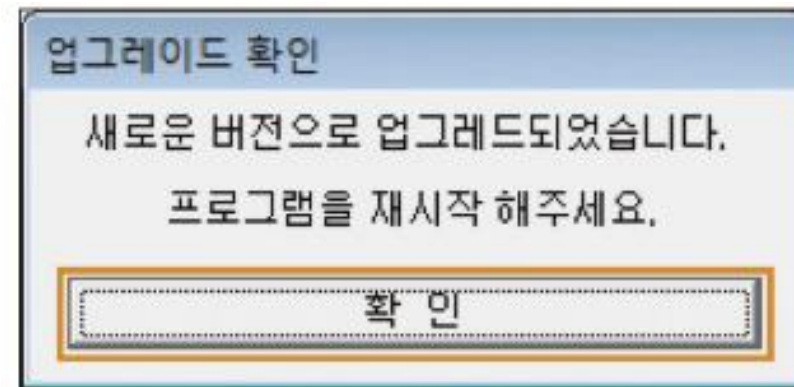
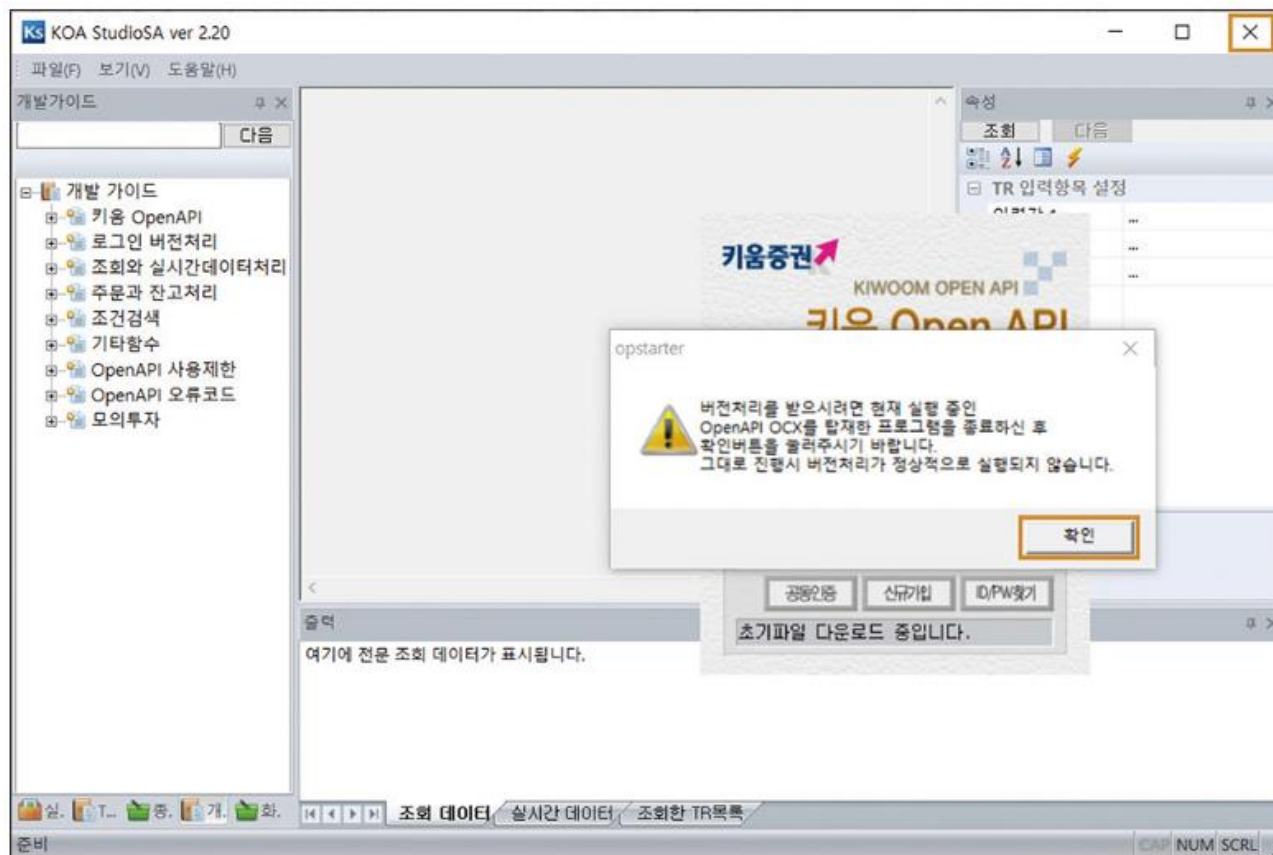
Step 1 홈페이지에서

Step 2 영웅문4(HT)

# 접속확인하기



The Kiwoom Open API login screen features the Kiwoom logo and the text 'KIWOOM OPEN API' and '키움 Open API'. It includes three input fields: '고객 ID' (Customer ID), '비밀번호' (Password), and '인증비밀번호' (Authentication Password). Below these fields are three buttons: '로그인' (Login), '회원설정' (Member Settings), and '종료' (End). There are also two checkboxes: '고객 아이디 저장' (Save Customer ID) and '모의투자 접속' (Connect to Mock Investment), both of which are checked. At the bottom, there are three buttons: '공동인증' (Joint Authentication), '신규가입' (New Sign-up), and 'ID/PW찾기' (Find ID/PW). A message at the bottom reads 'ID 와 비밀번호를 입력해 주십시오.' (Please enter your ID and password).

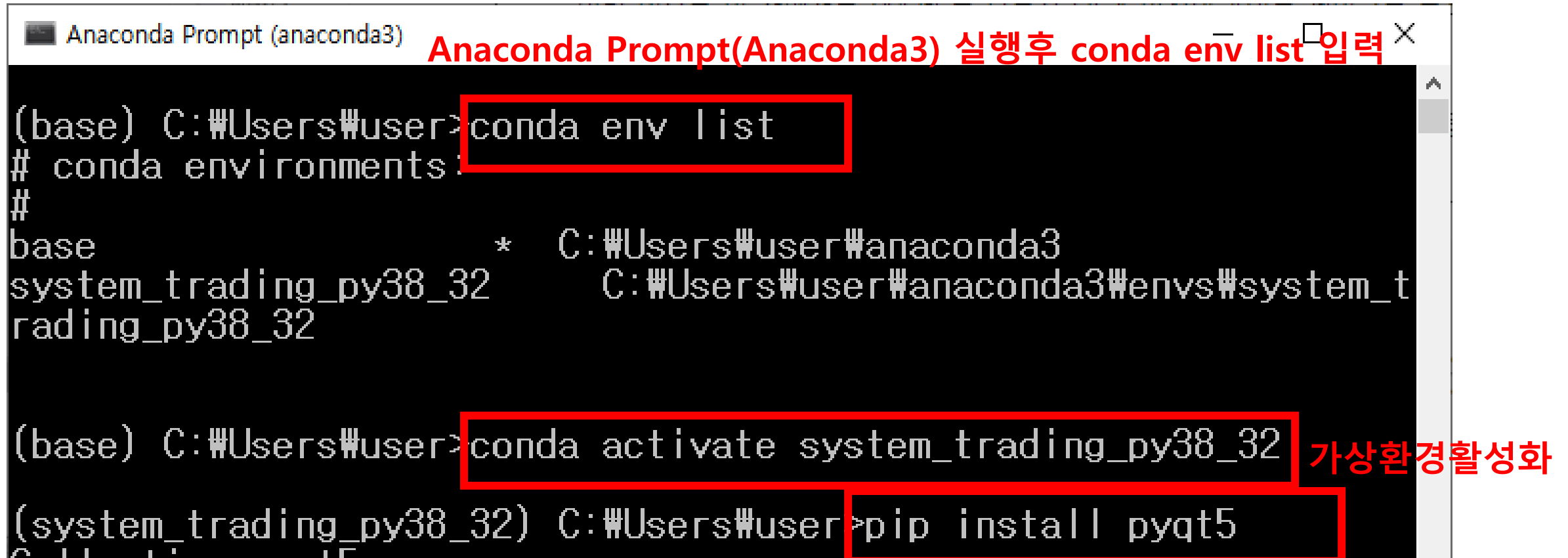


이때 확인버튼을 먼저 누르지 말고 꼭 창을 종료후에 확인버튼누르기



# PyQt5 설치

# PyQt5-GUI Programming



The screenshot shows the Anaconda Prompt window with the following text:

```
Anaconda Prompt (anaconda3)
(base) C:\Users\User>conda env list
# conda environments:
#
base                  *  C:\Users\User\anaconda3
system_trading_py38_32  C:\Users\User\anaconda3\envs\system_t
rading_py38_32

(base) C:\Users\User>conda activate system_trading_py38_32
(system_trading_py38_32) C:\Users\User>pip install pyqt5
```

Red boxes highlight the commands: `conda env list`, `conda activate system_trading_py38_32`, and `pip install pyqt5`. Red text annotations are present: "Anaconda Prompt(Anaconda3) 실행후 conda env list 입력" (input conda env list after running Anaconda Prompt(Anaconda3)), "가상환경활성화" (activate virtual environment) next to the activate command, and "PyQt5 설치" (install PyQt5) below the pip command.

PyQt5 설치

\* 판단스도 설치하기 : `pip install padans`