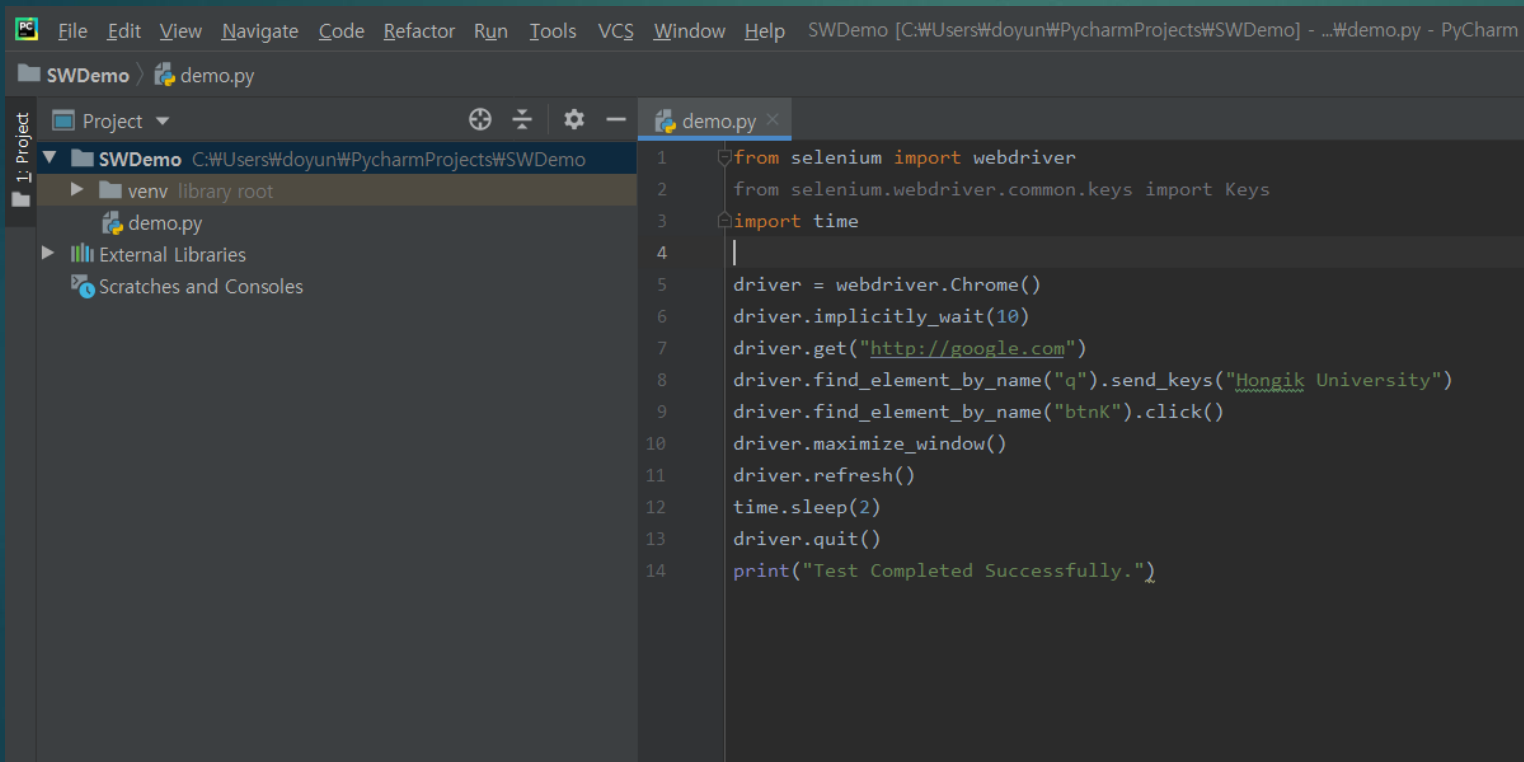
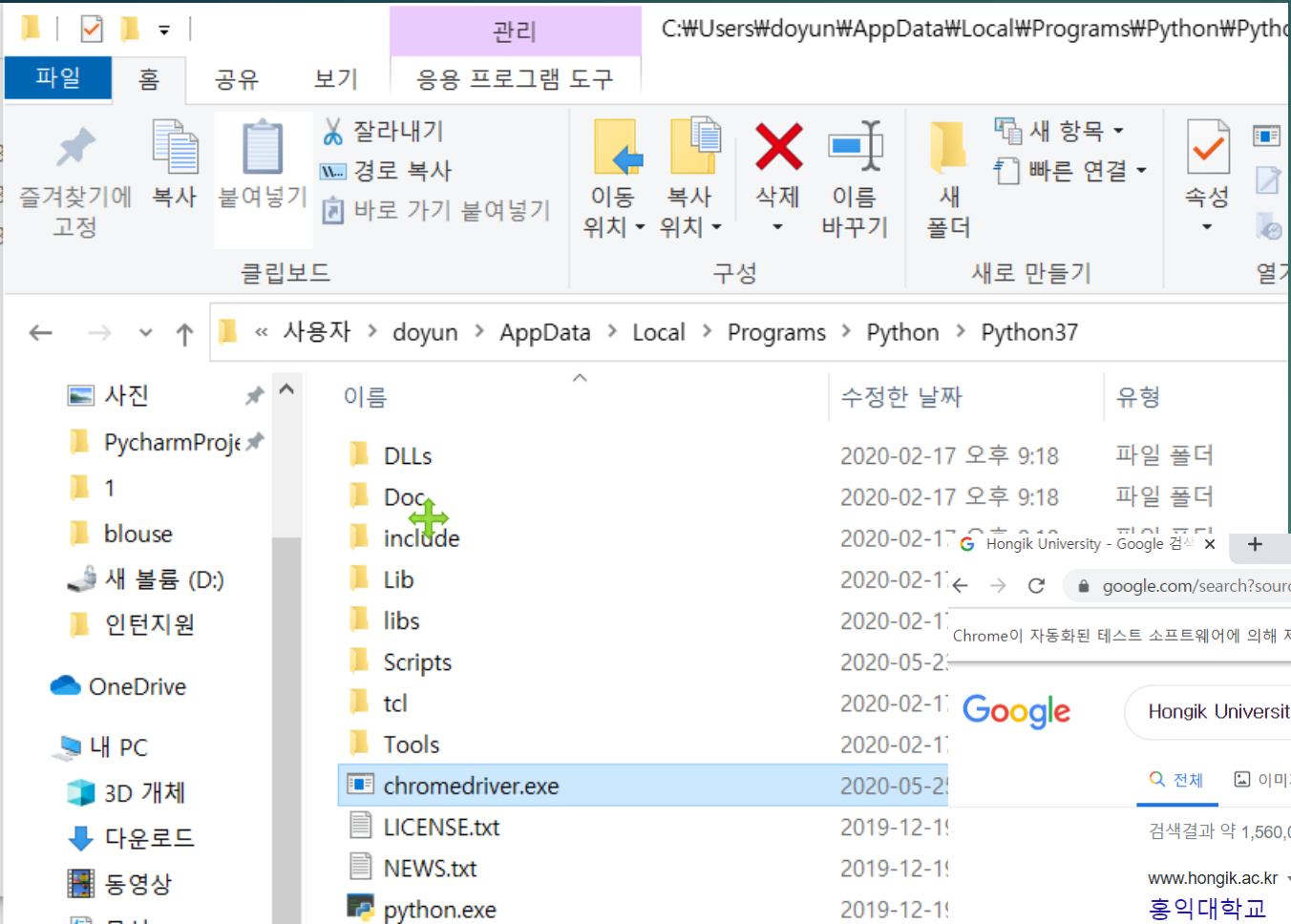


# Selenium Demo



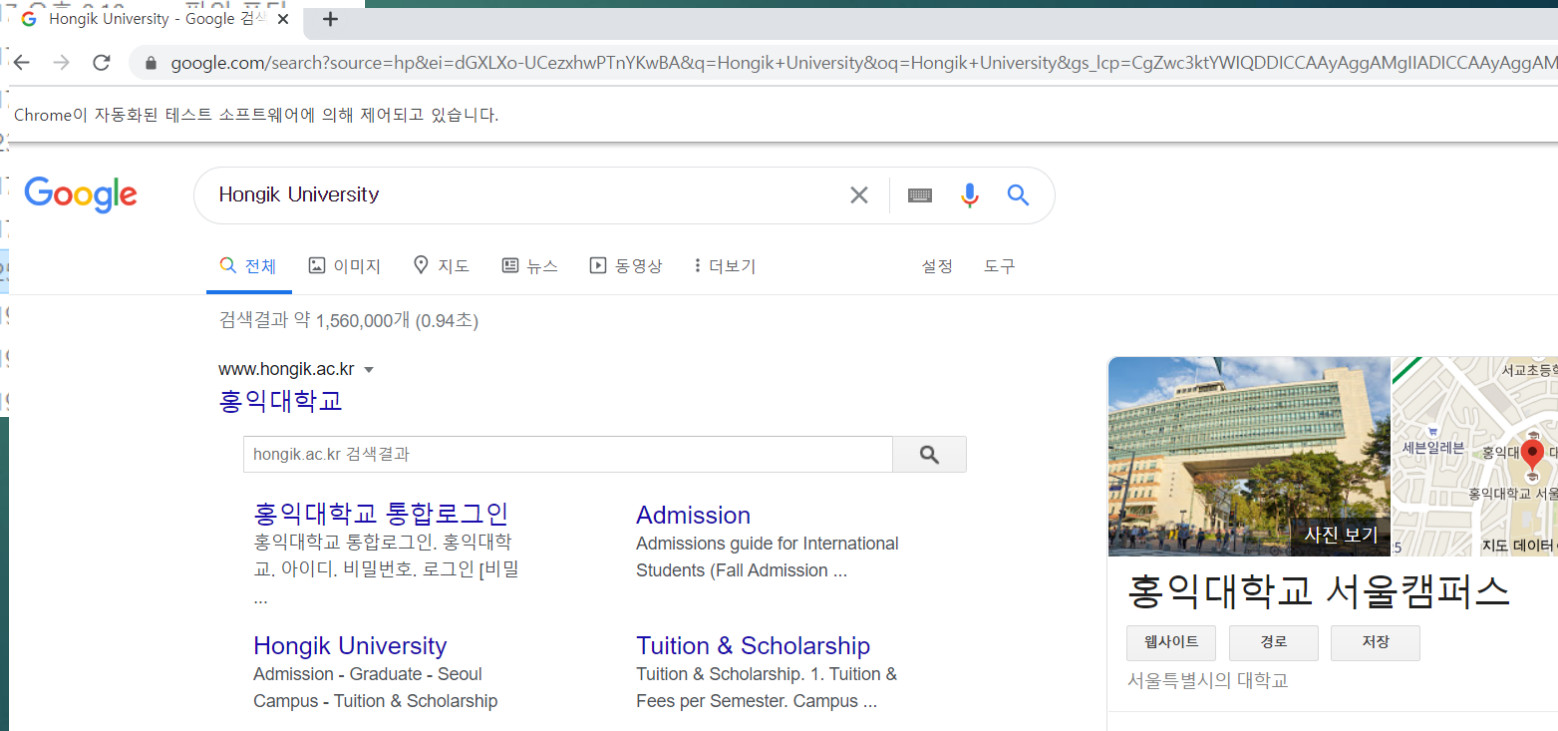
```
File Edit View Navigate Code Refactor Run Tools VCS Window Help SWDemo [C:\Users\doyun\PycharmProjects\SWDemo] - ...demo.py - PyCharm
SWDemo > demo.py
Project
  SWDemo C:\Users\doyun\PycharmProjects\SWDemo
    venv library root
    demo.py
  External Libraries
  Scratches and Consoles
demo.py
1 from selenium import webdriver
2 from selenium.webdriver.common.keys import Keys
3 import time
4
5 driver = webdriver.Chrome()
6 driver.implicitly_wait(10)
7 driver.get("http://google.com")
8 driver.find_element_by_name("q").send_keys("Hongik University")
9 driver.find_element_by_name("btnK").click()
10 driver.maximize_window()
11 driver.refresh()
12 time.sleep(2)
13 driver.quit()
14 print("Test Completed Successfully.")
```

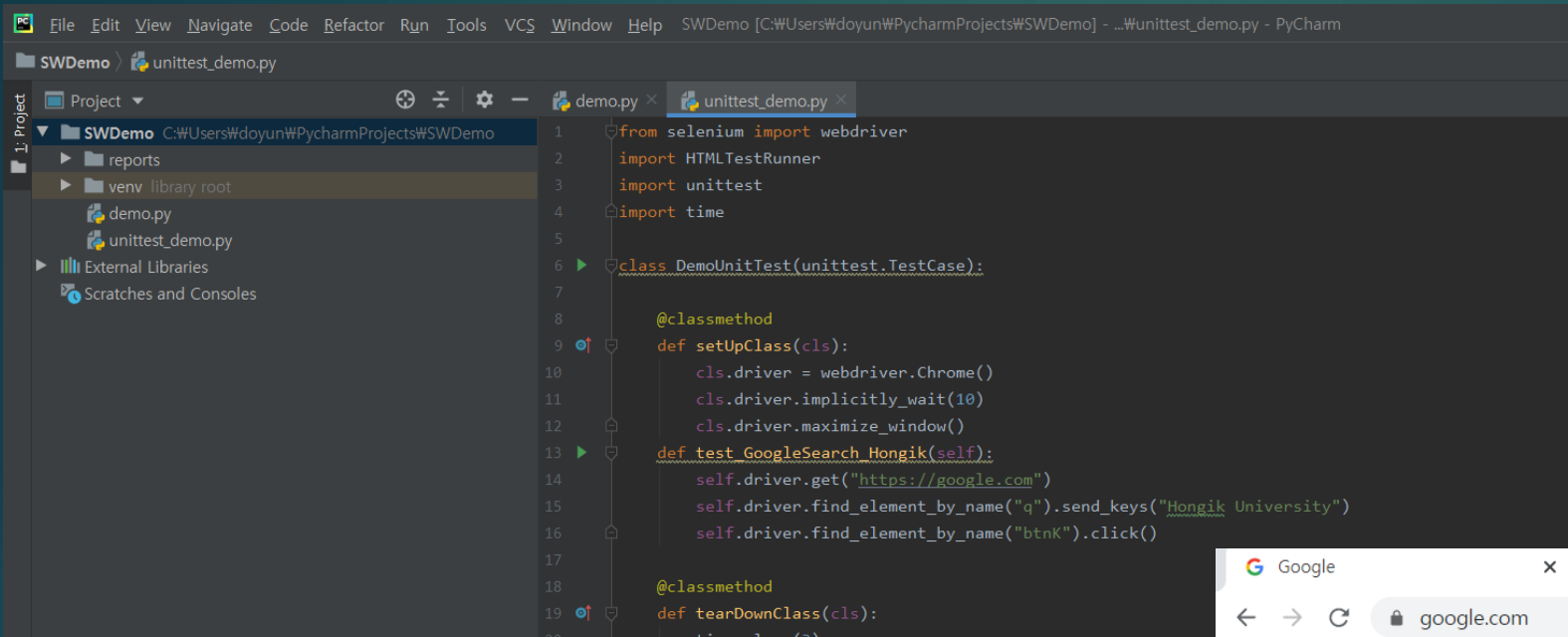
옆의 CODE를 통해  
SELENIUM을 사용하여  
기능을 TEST하였다.



TEST하기 위해, CHROMEDRIVER.EXE  
FILE을 받아, 폴더에 넣어 놓았다.

그리고 실행 결과, 아래와 같이  
SELENIUM에 의해 제어되었다.



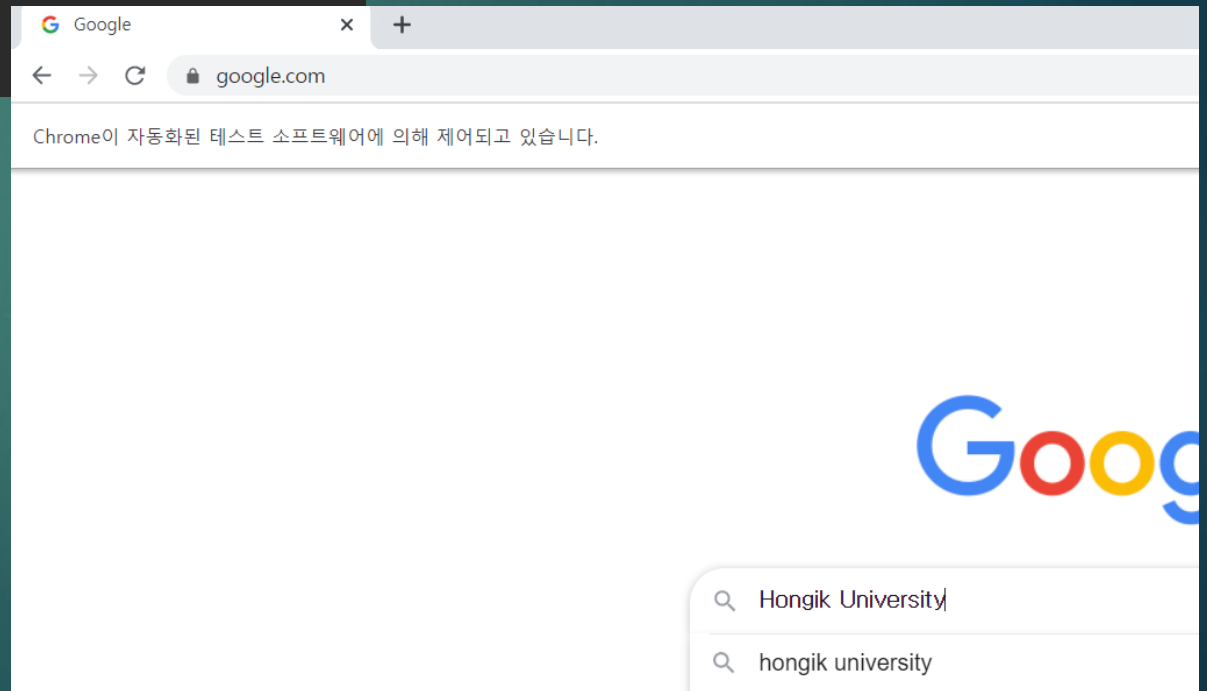


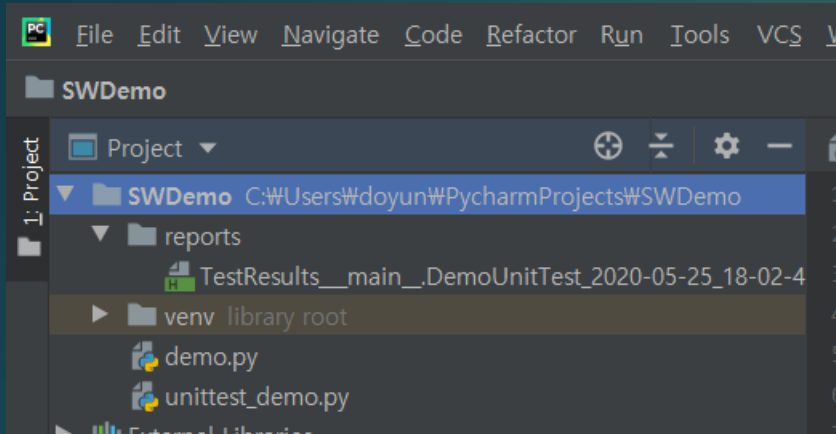
The image shows the PyCharm IDE interface. The left sidebar displays the project structure for 'SWDemo', including a 'venv' directory and files 'demo.py' and 'unittest\_demo.py'. The main editor window shows the code for 'unittest\_demo.py'. The code imports 'webdriver' from 'selenium', 'HTMLTestRunner' and 'unittest', and 'time'. It defines a 'DemoUnitTest' class inheriting from 'unittest.TestCase'. The class has a 'setUpClass' method that initializes a Chrome WebDriver, waits for 10 seconds, and maximizes the window. It also has a 'test\_GoogleSearch\_Hongik' method that navigates to 'https://google.com', finds the search input field, enters 'Hongik University', and clicks the search button. Finally, there is a 'tearDownClass' method that calls 'time.sleep(2)'. The code is written in a clean, readable style with proper indentation and comments.

```
1 from selenium import webdriver
2 import HTMLTestRunner
3 import unittest
4 import time
5
6 class DemoUnitTest(unittest.TestCase):
7
8     @classmethod
9     def setUpClass(cls):
10         cls.driver = webdriver.Chrome()
11         cls.driver.implicitly_wait(10)
12         cls.driver.maximize_window()
13
14     def test_GoogleSearch_Hongik(self):
15         self.driver.get("https://google.com")
16         self.driver.find_element_by_name("q").send_keys("Hongik University")
17         self.driver.find_element_by_name("btnK").click()
18
19     @classmethod
20     def tearDownClass(cls):
21         time.sleep(2)
```

TEST 코드를 정돈하여, PYTHON 스타일로 다시 설계하여 작성 하였고, TEST 결과를 받기 위해 HTML\_TEST\_RUNNER를 IMPORT하였다.

실행 결과, 오른쪽과 같이 TEST가 진행되었다.





실행 된 후, 왼쪽과 같이 Test결과를 담은 HTML 파일이 생성되었다.

아래는 그 파일을 열어본 결과이다.

A screenshot of a web browser window displaying the 'Unittest Results' page. The browser has multiple tabs open, including 'PowerPoint 프레젠테이션', 'html-testRunner · PyPI', '홍익대학교', '학생 클래스넷', 'NAVER', and 'Unittest Results'. The address bar shows the URL 'localhost:63342/SWDemo/reports/TestResults\_\_main\_\_.DemoUnitTest\_2020-05-25\_18-02-41.html?\_ijt=5929I5g1rvn1gst2kbclkbjtj'. The page content includes:

**Unittest Results**

**Start Time:** 2020-05-25 18:02:41

**Duration:** 3.86 s

**Summary:** Total: 1, Pass: 1

__main__.DemoUnitTest	Status
test_GoogleSearch_Hongik	Pass

Total: 1, Pass: 1 -- Duration: 3.86 s