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Python

Flask

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- 플라스크(Flask)는 오스트리아의 오픈소스 개발자 아민 로나허(Armin Ronacher)가 만든 파이썬 웹 프레임워크
- 플라스크는 마이크로 프레임워크(Microframework)
  - 핵심기능만 간결하게 유지하고 확장이 가능하도록 다양한 기능을 지원
- 플라스크와 장고(Django)는 파이썬 웹 프레임워크의 양대 산맥
- <https://flask-docs-kr.readthedocs.io/ko/latest/>



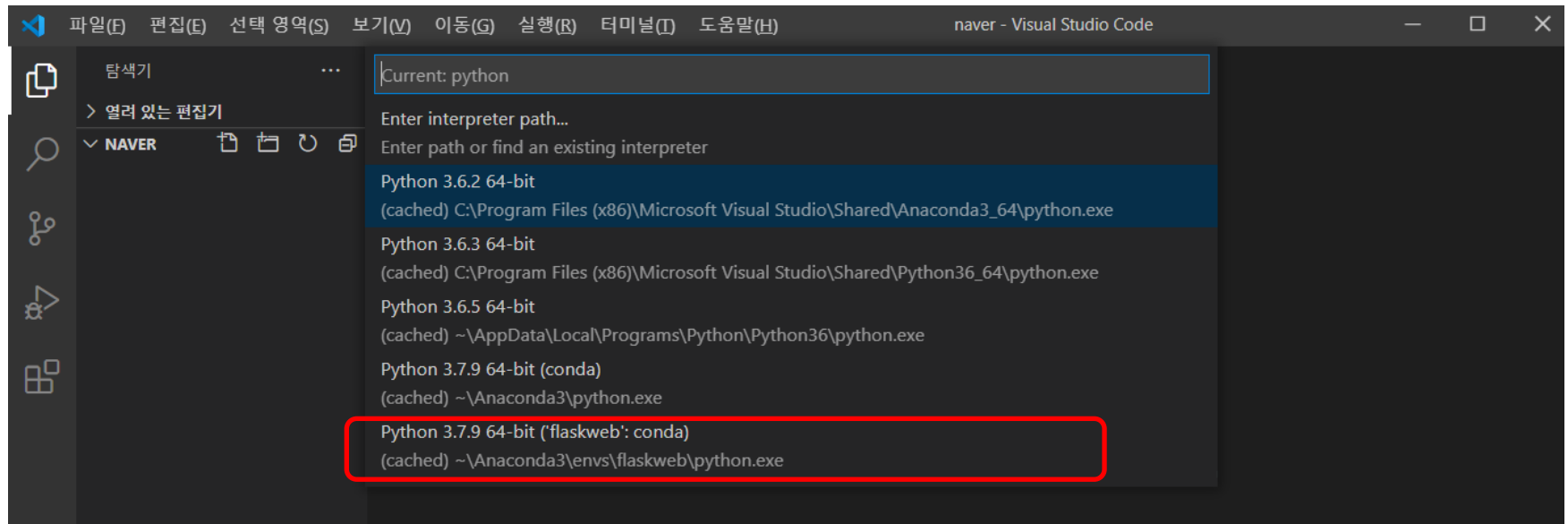
- 파이썬 프로젝트를 진행할 때 독립된 환경 도구
- 파이썬 버전 혹은 라이브러리 버전에 따른 프로젝트 환경 구성
  - (예) 파이썬 2.7, 파이썬 3.8

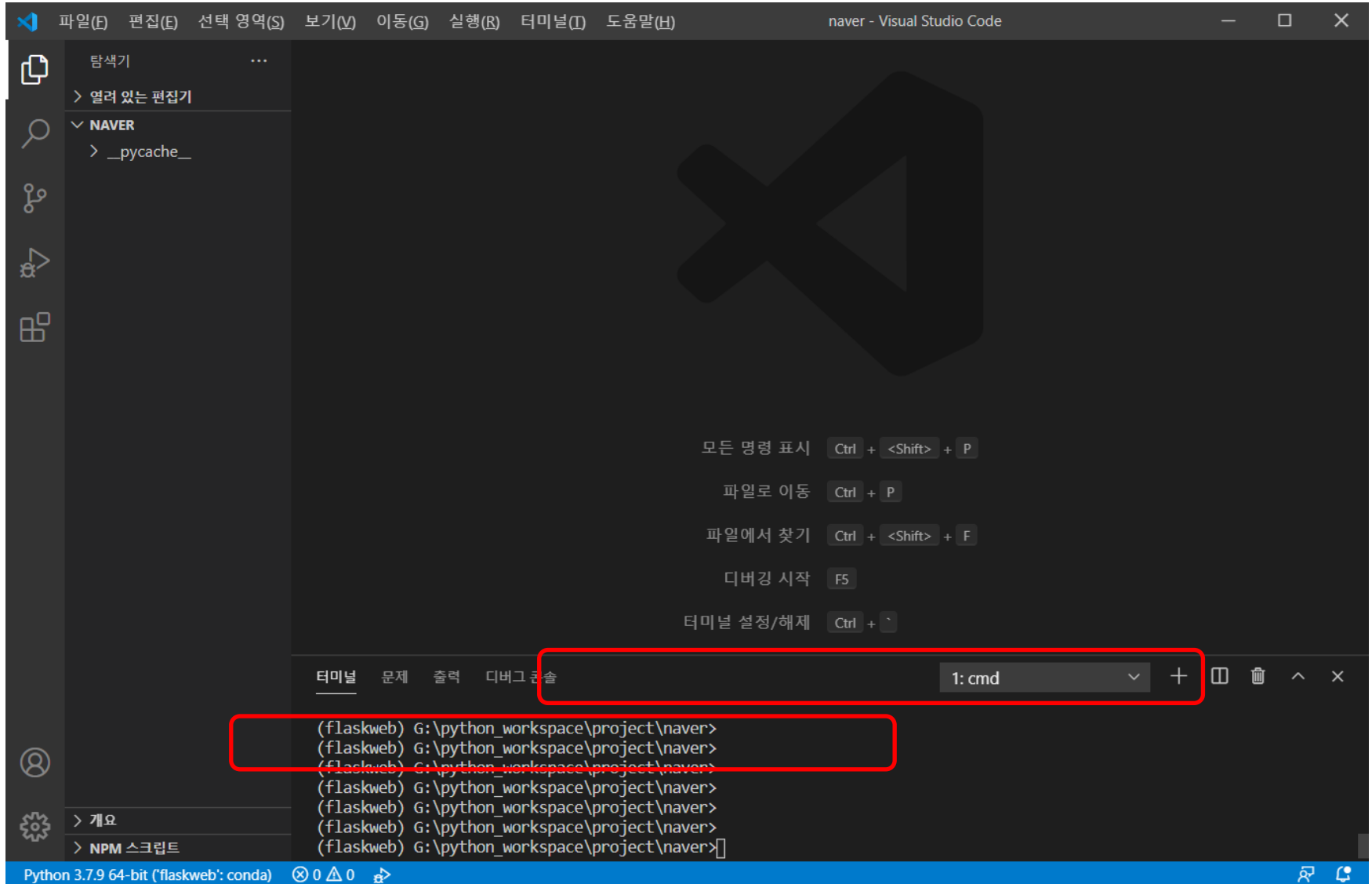
- Anaconda Prompt(Anaconda3) 선택
- 가상환경(Virtual Env) 생성

```
(base) G:\python_workspace> mkdir venvs
(base) G:\python_workspace> cd venvs
(base) G:\python_workspace\venvs> python -m venv flaskweb
(base) G:\python_workspace\venvs> cd flaskweb
(base) G:\python_workspace\venvs\flaskweb> cd Scripts
(base) G:\python_workspace\venvs\flaskweb\Scripts> activate
(flaskweb) (base) G:\python_workspace\venvs\flaskweb\Scripts> conda
install Flask
--- 생략 ---
Proceed ([y]/n)? (Enter)
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
```

- (base) G:\python\_workspace>mkdir porject

```
(base) G:\python_workspace>mkdir project
(base) G:\python_workspace>cd project
(base) G:\python_workspace\project>G:\python_workspace\venvs\flaskweb\Scripts\activate
(flaskweb) (base) G:\python_workspace\project>
(flaskweb) (base) G:\python_workspace\project>mkdir naver
(flaskweb) (base) G:\python_workspace\project>cd naver
(flaskweb) (base) G:\python_workspace\project\naver>
```





# Hello World

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The image shows a Visual Studio Code editor window with a Python file named `app.py` open. The file contains a simple Flask web application. The left sidebar shows the file explorer with the project structure: `NAVER` (expanded) containing `__pycache__` and `app.py`. The bottom panel shows the terminal output of running the application.

**app.py**

```
1 from flask import Flask
2 app = Flask(__name__)
3
4 @app.route("/")
5 def hello():
6     return "Hello World!"
7
8 if __name__ == "__main__":
9     app.run()
```

**터미널** 문제 출력 디버그 콘솔

```
(flaskweb) G:\python_workspace\project\naver>flask run
* Environment: production
  WARNING: Do not use the development server in a production environment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

Python 3.7.9 64-bit ('flaskweb': conda) 0 0 0 줄 9, 열 14 공백: 2 UTF-8 CRLF Python



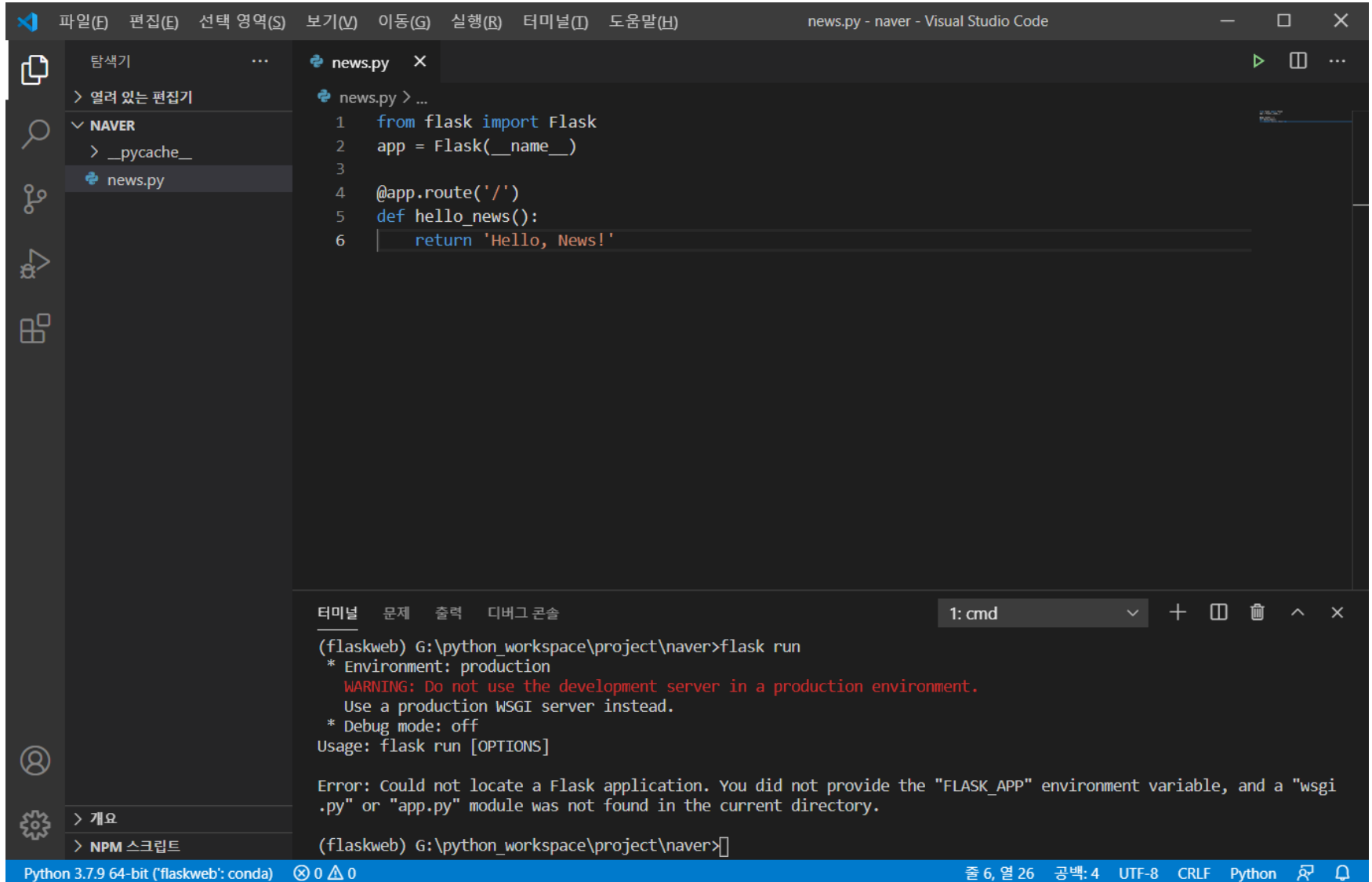
# Route

9

The screenshot shows the Visual Studio Code interface with a Python file named `news.py` open. The file contains the following code:

```
1 from flask import Flask
2 app = Flask(__name__)
3
4 @app.route('/')
5 def hello_news():
6     return 'Hello, News!'
```

The file explorer on the left shows the project structure with a folder named `NAVER` containing `__pycache__` and `news.py`. The terminal at the bottom shows the command prompt `(flaskweb) G:\python_workspace\project\naver>`. The terminal title bar indicates the shell is `1: cmd`. The status bar at the bottom shows the Python version as `Python 3.7.9 64-bit ('flaskweb': conda)` and the file encoding as `UTF-8`.



The image shows a Visual Studio Code editor window titled "news.py - naver - Visual Studio Code". The editor displays a Python file named "news.py" with the following code:

```
1 from flask import Flask
2 app = Flask(__name__)
3
4 @app.route('/')
5 def hello_news():
6     return 'Hello, News!'
```

The left sidebar shows the Explorer view with the file "news.py" selected under the "NAVER" folder. The bottom panel shows the Terminal view with the following output:

```
(flaskweb) G:\python_workspace\project\naver>flask run
* Environment: production
  WARNING: Do not use the development server in a production environment.
  Use a production WSGI server instead.
* Debug mode: off
Usage: flask run [OPTIONS]

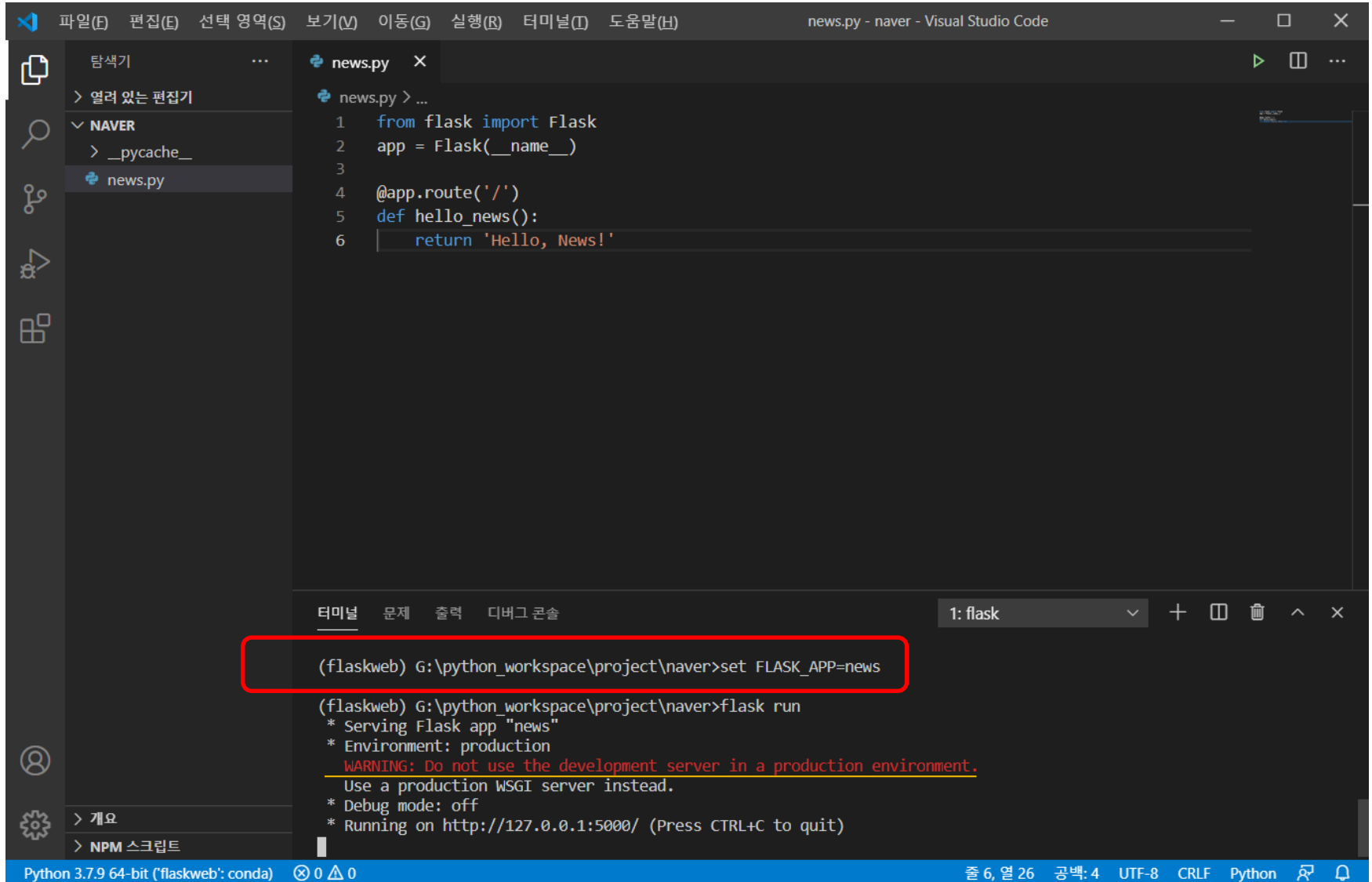
Error: Could not locate a Flask application. You did not provide the "FLASK_APP" environment variable, and a "wsgi.py" or "app.py" module was not found in the current directory.

(flaskweb) G:\python_workspace\project\naver>
```

The status bar at the bottom indicates "Python 3.7.9 64-bit (flaskweb: conda)" and shows 0 errors, 0 warnings, and 0 info messages. The right side of the status bar shows "줄 6, 열 26" (Line 6, Column 26), "공백: 4" (Spaces: 4), "UTF-8", "CRLF", "Python", and icons for search, run, and refresh.

# FLASK\_APP 셋팅

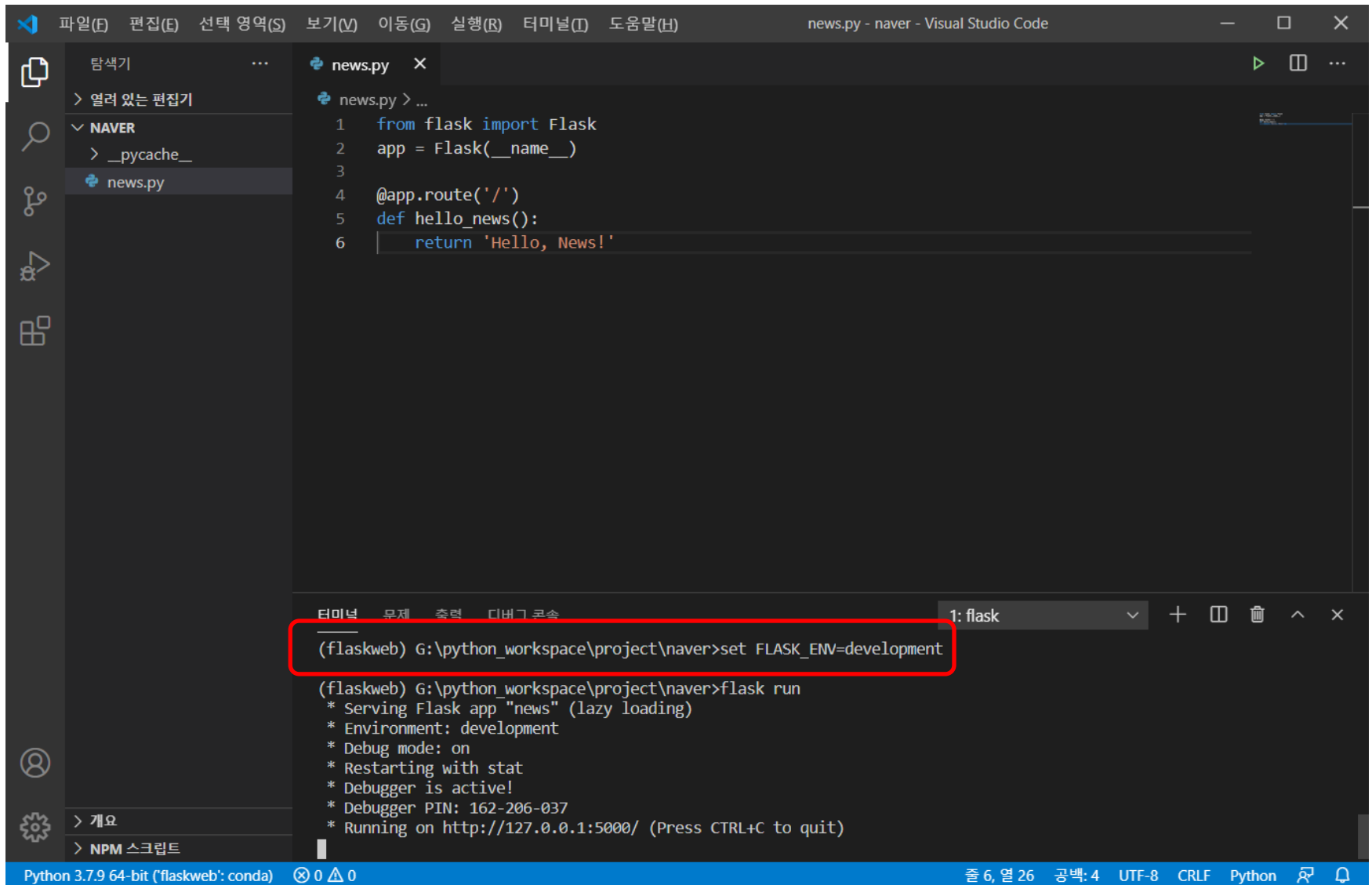
11



```
news.py
1 from flask import Flask
2 app = Flask(__name__)
3
4 @app.route('/')
5 def hello_news():
6     return 'Hello, News!'
```

```
(flaskweb) G:\python_workspace\project\naver>set FLASK_APP=news
(flaskweb) G:\python_workspace\project\naver>flask run
* Serving Flask app "news"
* Environment: production
  WARNING: Do not use the development server in a production environment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

Python 3.7.9 64-bit ('flaskweb': conda) 0 0 0 줄 6, 열 26 공백: 4 UTF-8 CRLF Python



Visual Studio Code interface showing a Flask application setup. The file explorer on the left shows a project named 'NAVER' with files like '\_\_pycache\_\_' and 'news.py'. The editor shows 'news.py' with Python code for a Flask app. The terminal at the bottom shows the command 'set FLASK\_ENV=development' being executed in a 'flaskweb' environment, followed by 'flask run' output.

```
news.py
1 from flask import Flask
2 app = Flask(__name__)
3
4 @app.route('/')
5 def hello_news():
6     return 'Hello, News!'
```

터미널 문제 출력 디버그 콘솔 1: flask

```
(flaskweb) G:\python_workspace\project\naver>set FLASK_ENV=development
(flaskweb) G:\python_workspace\project\naver>flask run
* Serving Flask app "news" (lazy loading)
* Environment: development
* Debug mode: on
* Restarting with stat
* Debugger is active!
* Debugger PIN: 162-206-037
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

Python 3.7.9 64-bit ('flaskweb': conda) 0 0 0 출 6, 열 26 공백: 4 UTF-8 CRLF Python

Visual Studio Code interface showing a file explorer on the left, a main editor area, and a terminal at the bottom.

**File Explorer (Left):**

- 탐색기 (Search)
- > 열려 있는 편집기 (Open Editors)
- NAVER
  - > \_\_pycache\_\_
  - news
    - \_\_init\_\_.py

**Main Editor Area:**

Large dark area with the Visual Studio Code logo and keyboard shortcuts:

- 모든 명령 표시: `Ctrl + <Shift> + P`
- 파일로 이동: `Ctrl + P`
- 파일에서 찾기: `Ctrl + <Shift> + F`
- 디버깅 시작: `F5`
- 터미널 설정/해제: `Ctrl + ``

**Terminal (Bottom):**

1: cmd

```
(flaskweb) G:\python_workspace\project\naver>move news.py ./news/__init__.py
1개 파일을 이동했습니다.

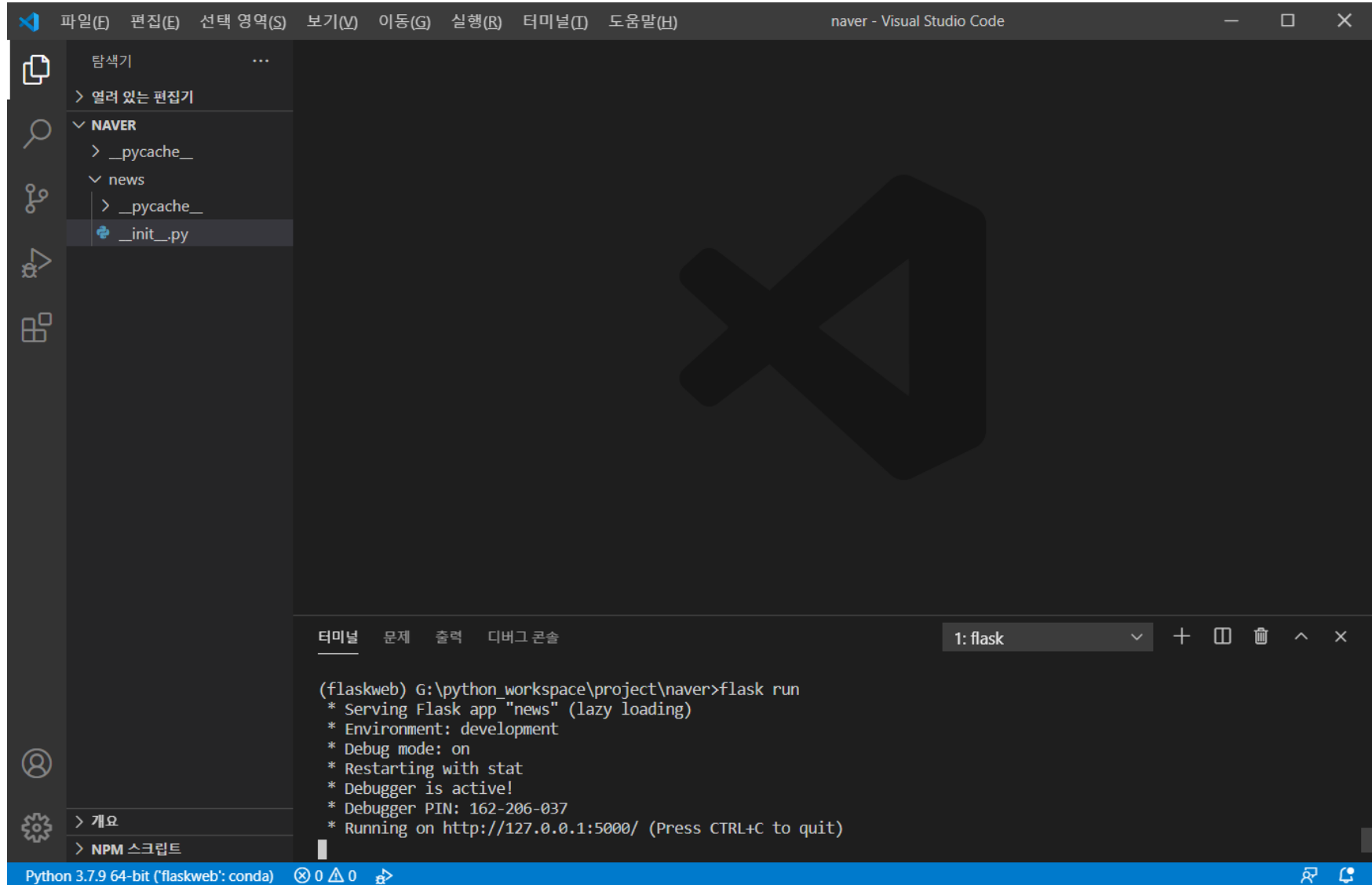
(flaskweb) G:\python_workspace\project\naver>
```

**Status Bar (Bottom):**

Python 3.7.9 64-bit ('flaskweb': conda) 0 0

## news는 news.py 파일을 news모듈인 ./news/\_\_init\_\_.py 파일을 가리킨다

14



# create\_app 함수 선언

15

The image shows a Visual Studio Code window with the following components:

- File Explorer (Left):** Shows a project structure with a folder named `NAVER` containing subfolders `__pycache__` and `news`. The `__init__.py` file is selected.
- Editor (Center):** Displays the content of `__init__.py` with the following code:

```
news > __init__.py > ...
1  from flask import Flask
2
3  def create_app():
4      app = Flask(__name__)
5
6      @app.route('/')
7      def hello_news():
8          return 'Hello, News!'
9
10     return app
11
```
- Terminal (Bottom):** Shows the output of running the application with `flask run`. The output includes:

```
터미널 문제 출력 디버그 콘솔
1: flask
* Debugger PIN: 162-206-037
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
* Detected change in 'G:\python_workspace\project\naver\news\__init__.py', reloading
* Restarting with stat
* Debugger is active!
* Debugger PIN: 162-206-037
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
127.0.0.1 - - [27/Dec/2020 15:29:58] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [27/Dec/2020 15:30:01] "GET / HTTP/1.1" 200 -
[]
```
- Status Bar (Bottom):** Shows the Python version as `Python 3.7.9 64-bit (flaskweb: conda)` and the file encoding as `UTF-8`.

...

검색기

열려 있는 편집기

NAVER

\_\_pycache\_\_

news

\_\_pycache\_\_

views

main\_views.py

\_\_init\_\_.py

\_\_init\_\_.py

main\_views.py X

news > views > main\_views.py > ...

1

2

3

4

5

6

7

from flask import Blueprint

bp = Blueprint('main', \_\_name\_\_, url\_prefix='/') # url\_prefix='/main'이라면?

@bp.route('/')

def hello\_news():

return 'Hello, News!'

...

검색기

열려 있는 편집기

NAVER

\_\_pycache\_\_

news

\_\_pycache\_\_

views

\_\_pycache\_\_

main\_views.py

\_\_init\_\_.py

\_\_init\_\_.py X

main\_views.py

news > \_\_init\_\_.py > create\_app

1

2

3

4

5

6

7

8

9

10

from flask import Flask

from .views import main\_views

def create\_app():

app = Flask(\_\_name\_\_)

app.register\_blueprint(main\_views.bp)

return app



파일(F) 편집(E) 선택 영역(S) 보기(V) 이동(G) 실행(R) 터미널(T) 도움말(H) main\_views.py - naver - Visual Studio Code

탐색기

- > 열려 있는 편집기
- NAVER
  - > \_\_pycache\_\_
  - news
    - > \_\_pycache\_\_
    - views
      - > \_\_pycache\_\_
      - main\_views.py
- \_\_init\_\_.py

```

1  from flask import Blueprint
2
3  bp = Blueprint('main', __name__, url_prefix='/') # url_prefix='/main'이라면?
4
5  @bp.route('/hello')
6  def hello_news():
7      return 'Hello, News!'
8
9  @bp.route('/')
10 def index():
11     return 'News Main Page!!'
12

```

터미널 문제 출력 디버그 콘솔 1: flask

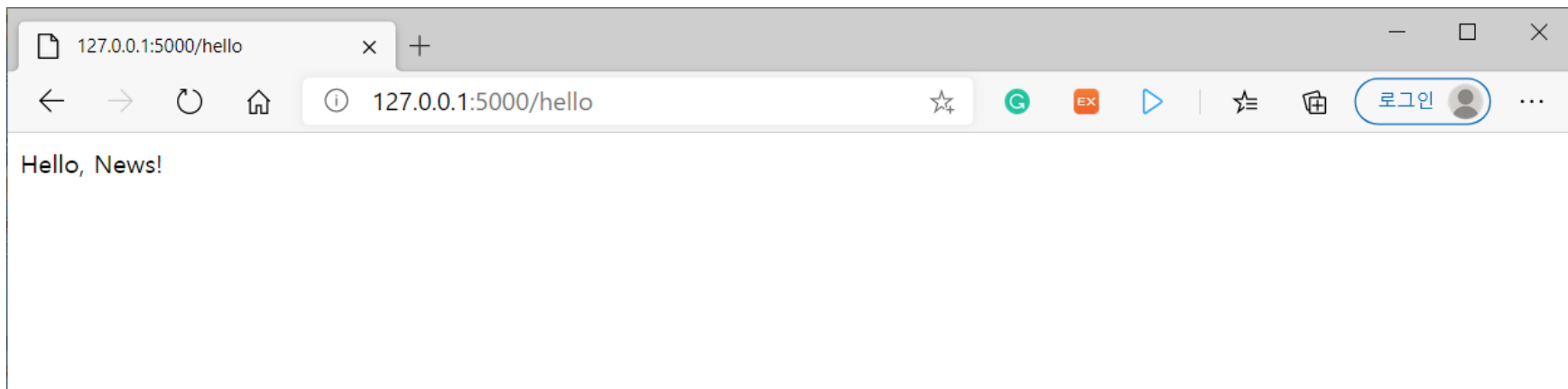
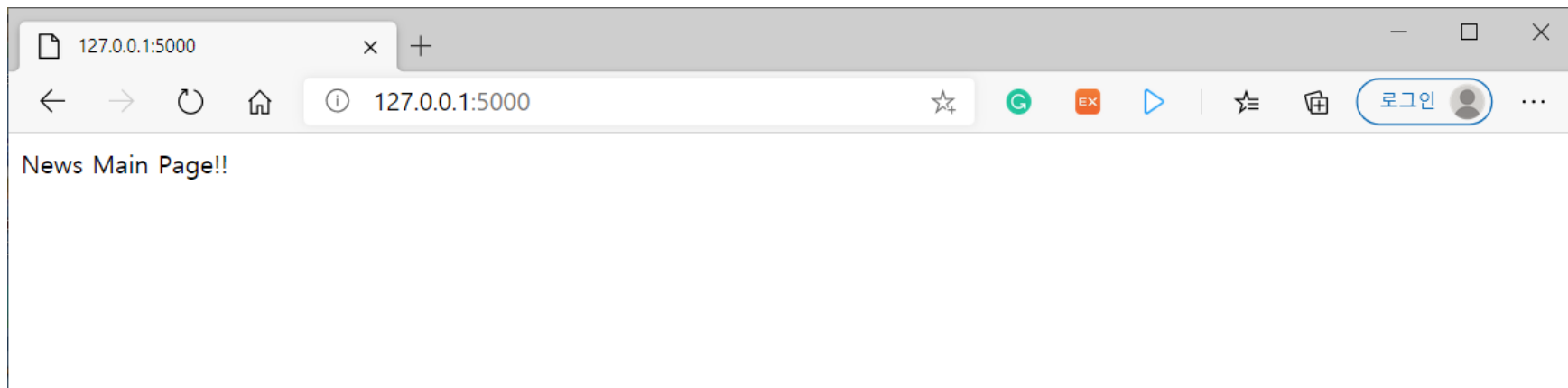
```

* Restarting with stat
* Debugger is active!
* Debugger PIN: 162-206-037
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
* Detected change in 'G:\python_workspace\project\naver\news\views\main_views.py', reloading
* Restarting with stat
* Debugger is active!
* Debugger PIN: 162-206-037
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)

```

Python 3.7.9 64-bit ('flaskweb': conda) 0 0

줄 12, 열 1 공백: 2 UTF-8 CRLF Python



Flask App

127.0.0.1:5000

로그인

News Crawl Home About

News

| 번호 | 제목                                      | 일시                  |
|----|---|---------------------|
| 1  | 울산 울주군 육아종합지원센터, 비대면 <b>크리스마스</b> 키트 배부 | 2020-12-27 22:39:00 |
| 2  | 유곡동 주민 강영이씨, 중구 태화동에 케이크 전달             | 2020-12-27 22:39:00 |
| 3  | <b>크리스마스</b> 선물 남긴 익명의 기부자들             | 2020-12-27 22:39:00 |
| 4  | 코로나19로 활기 잃은 도심...<b>크리스마스</b> 연휴도 '썰렁' | 2020-12-27 22:39:00 |
| 5  | 연말연시 '객실 50% 제한'에 혼돈의 숙박업계              | 2020-12-27 22:39:00 |
| 6  | 희망 밝히는 <b>크리스마스</b> 트리                  | 2020-12-27 22:38:00 |
| 7  | 울산항만관리(주), <b>크리스마스</b> 키트 지원사업 진행      | 2020-12-27 22:38:00 |
| 8  | 울산 울주군 온양읍지역사회보장협의체, 아동방한복 지원           | 2020-12-27 22:38:00 |