Exercise 2.1Task

1. Write two to three sentences on why Django is so popular among web developers.

   Django is so popular due to its fast development and its DRY principles that keep it fast and efficient. It also comes with an admin interface that helps easily set up Content delivery networks and content management. And finally its great security and huge community making it easy to find support if needed.

2. After some research, list five large companies that use Django. Specify what the company's product or service is and what they use Django for.
   - Spotify; Django helps them with speed, machine learning, and its AI options.
   - Instagram; Django helps them process the vast amount of data they receive and helps keep user interactions fast.
   - Netflix; Django helps with full content development and uses its open source packages.
   - Facebook; Django helps them keep a smooth and effortless user interaction with uploading of pictures, posts, and statuses.
   - Pinterest; Django helps keep performance good and fast even with a huge user load.
3. For each of the following scenarios, explain if you would use Django (and why or why not):
   - You need to develop a web application with multiple users.

     I would use Django because it would help create and deploy the app quickly as well as its scalability to add new components and keep up with demand.
   - You need fast deployment and the ability to make changes as you proceed.

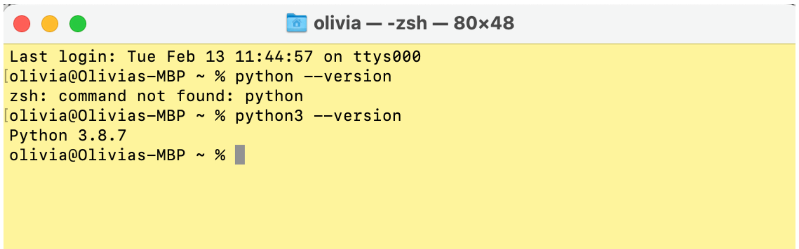
     I would use Django because it has a fast deployment feature and its scalability will help create and add new hardware and components.
   - You need to build a very basic application, which doesn't require any database access or file operations.

     I would not use Django, its biggest strength is its features including database access and file management. If you aren't using them it will be more of a burden on the servers.
   - You want to build an application from scratch and want a lot of control over how it works.

     I would not use Django, it is a very strict structure and I would not have much flexibility and would therefore loose some of my control.
   - You're about to start working on a big project and are afraid of getting stuck and needing additional support.

     I would use Django, it has a massive community to contact and reach out to if I get stuck.

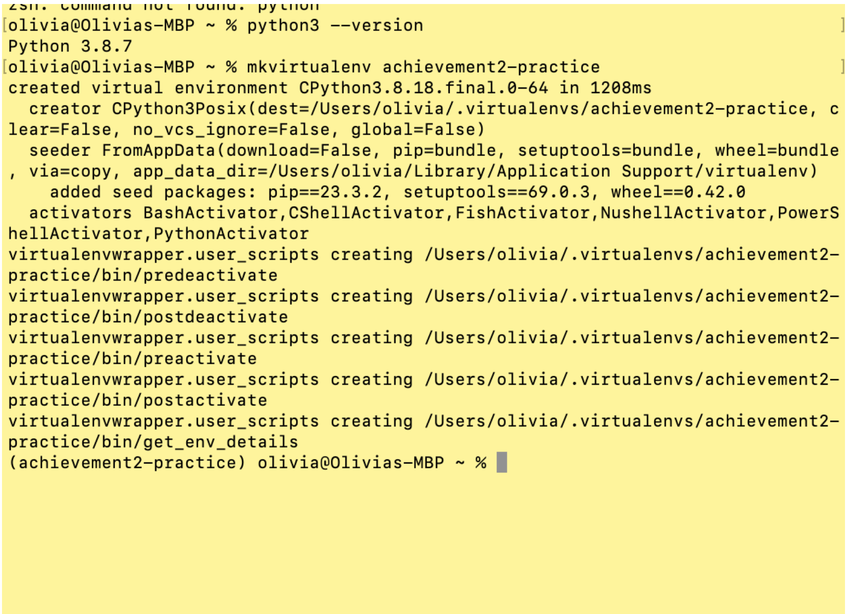
Python Version



olivia — -zsh — 80×48

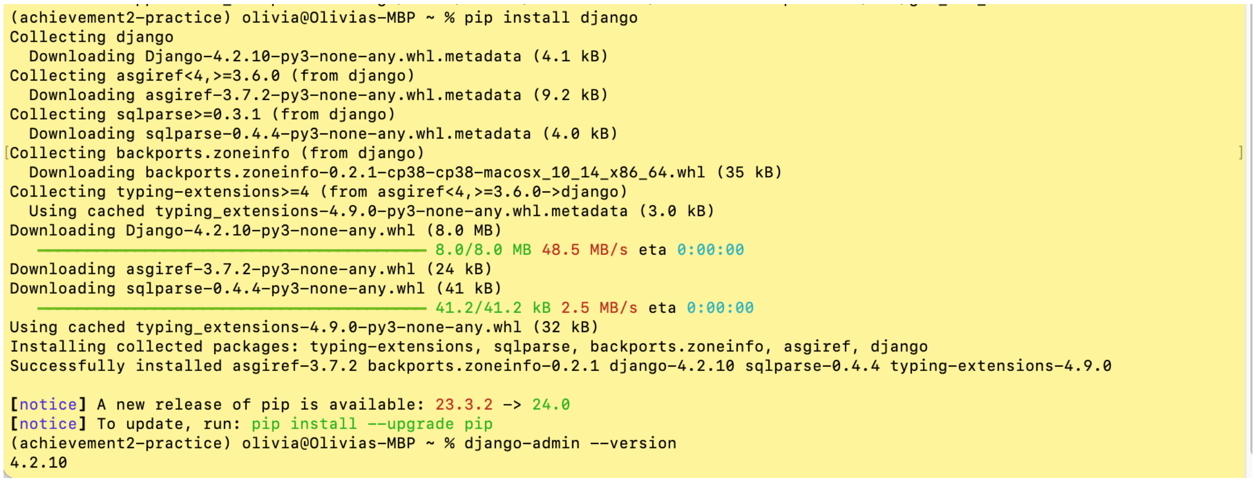
```
Last login: Tue Feb 13 11:44:57 on ttys000
olivia@Olivias-MBP ~ % python --version
zsh: command not found: python
olivia@Olivias-MBP ~ % python3 --version
Python 3.8.7
olivia@Olivias-MBP ~ %
```

Create Virtual Environment



```
zsh: command not found: python
olivia@Olivias-MBP ~ % python3 --version
Python 3.8.7
olivia@Olivias-MBP ~ % mkvirtualenv achievement2-practice
created virtual environment CPython3.8.18.final.0-64 in 1208ms
  creator CPython3Posix(dest=/Users/olivia/.virtualenvs/achievement2-practice, c
lear=False, no_vcs_ignore=False, global=False)
  seeder FromAppData(download=False, pip=bundle, setuptools=bundle, wheel=bundle
, via=copy, app_data_dir=/Users/olivia/Library/Application Support/virtualenv)
    added seed packages: pip==23.3.2, setuptools==69.0.3, wheel==0.42.0
  activators BashActivator,CShellActivator,FishActivator,NushellActivator,PowerS
hellActivator,PythonActivator
virtualenvwrapper.user_scripts creating /Users/olivia/.virtualenvs/achievement2-
practice/bin/predeactivate
virtualenvwrapper.user_scripts creating /Users/olivia/.virtualenvs/achievement2-
practice/bin/postdeactivate
virtualenvwrapper.user_scripts creating /Users/olivia/.virtualenvs/achievement2-
practice/bin/preactivate
virtualenvwrapper.user_scripts creating /Users/olivia/.virtualenvs/achievement2-
practice/bin/postactivate
virtualenvwrapper.user_scripts creating /Users/olivia/.virtualenvs/achievement2-
practice/bin/get_env_details
(achievement2-practice) olivia@Olivias-MBP ~ %
```

Installed Django



```
(achievement2-practice) olivia@Olivias-MBP ~ % pip install django
Collecting django
  Downloading Django-4.2.10-py3-none-any.whl.metadata (4.1 kB)
Collecting asgiref<4,>=3.6.0 (from django)
  Downloading asgiref-3.7.2-py3-none-any.whl.metadata (9.2 kB)
Collecting sqlparse>=0.3.1 (from django)
  Downloading sqlparse-0.4.4-py3-none-any.whl.metadata (4.0 kB)
Collecting backports.zoneinfo (from django)
  Downloading backports.zoneinfo-0.2.1-cp38-cp38-macosx_10_14_x86_64.whl (35 kB)
Collecting typing-extensions>=4 (from asgiref<4,>=3.6.0->django)
  Using cached typing_extensions-4.9.0-py3-none-any.whl.metadata (3.0 kB)
Downloading Django-4.2.10-py3-none-any.whl (8.0 MB)
   ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 8.0/8.0 MB 48.5 MB/s eta 0:00:00
Downloading asgiref-3.7.2-py3-none-any.whl (24 kB)
Downloading sqlparse-0.4.4-py3-none-any.whl (41 kB)
   ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 41.2/41.2 kB 2.5 MB/s eta 0:00:00
Using cached typing_extensions-4.9.0-py3-none-any.whl (32 kB)
Installing collected packages: typing-extensions, sqlparse, backports.zoneinfo, asgiref, django
Successfully installed asgiref-3.7.2 backports.zoneinfo-0.2.1 django-4.2.10 sqlparse-0.4.4 typing-extensions-4.9.0

[notice] A new release of pip is available: 23.3.2 -> 24.0
[notice] To update, run: pip install --upgrade pip
(achievement2-practice) olivia@Olivias-MBP ~ % django-admin --version
4.2.10
```