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

   It was born out of a need to serve fast-paced newsrooms, and describes itself today as the "web framework for perfectionists with deadlines". One of Django's core design principles is "Don't Repeat Yourself" (DRY), which states that "every distinct concept and/or piece of data should live in one, and only one, place". In other words, avoid duplication and repetition of code and design patterns whenever possible.

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.
   - Youtube–uses Django to ensure that new features are added and upgrades are implemented in the shortest time possible.
   - Spotify–uses Django to ensure optimum functionality of the app.
   - Instagram–uses Django to help process user interactions.
   - Disqus–uses Django's scalability and a wide variety of ready-to-implement solutions to allow them to easily meet the needs of its users.
   - Dropbox–uses Django to facilitate synchronization, enable sharing options, and allow storage of large files.

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 as it helps to deploy the app quickly and can store large amounts of data.

- You need fast deployment and the ability to make changes as you proceed.

I would use Django because, again, it deploys the app quickly and making changes are relatively simple.

- You need to build a very basic application, which doesn't require any database access or file operations.

I would not use Django because it requires a database, and has many unnecessary features for a small project.

- You want to build an application from scratch and want a lot of control over how it works.

I would not use Django because of all the features it comes installed with, making it much more difficult to move away from the core controls and you wouldn't be able to build it exactly your own way.

○ You're about to start working on a big project and are afraid of getting stuck and needing additional support.

I would use Django here as it, along with Python, are grow very rapidly, and the user base/community are willing to support it

4. Download and install Python (if you haven't done so already).
   ○ Run the appropriate command to check the Python version.
   ○ Take a screenshot of the terminal window with the command and version and paste it into your answers document.

```
(achievement2-practice) cjhart34@Coreys-MacBook-Air testscripts % python --version
Python 3.8.7
(achievement2-practice) cjhart34@Coreys-MacBook-Air testscripts %
```

5. If you haven't done so already, set up and create a virtual environment and name it `achievement2-practice`. Then:

   ○ Activate the virtual environment.

   ○ Take a screenshot of the activated environment and paste it into your answers document.

```
cjhart34@Coreys-MacBook-Air testscripts % mkvirtualenv achievement2-practice
created virtual environment CPython3.8.7.final.0-64 in 219ms
  creator CPython3Posix(dest=/Users/cjhart34/.virtualenvs/achievement2-practice, clear=False, no_vcs_ignore=False, global=False)
  seeder FromAppData(download=False, pip=bundle, setuptools=bundle, wheel=bundle, via=copy, app_data_dir=/Users/cjhart34/Library/Application Support/virtualenv)
    added seed packages: pip==22.3.1, setuptools==66.1.1, wheel==0.38.4
  activators BashActivator,CShellActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator
virtualenvwrapper.user_scripts creating /Users/cjhart34/.virtualenvs/achievement2-practice/bin/predeactivate
virtualenvwrapper.user_scripts creating /Users/cjhart34/.virtualenvs/achievement2-practice/bin/postdeactivate
virtualenvwrapper.user_scripts creating /Users/cjhart34/.virtualenvs/achievement2-practice/bin/preactivate
virtualenvwrapper.user_scripts creating /Users/cjhart34/.virtualenvs/achievement2-practice/bin/postactivate
virtualenvwrapper.user_scripts creating /Users/cjhart34/.virtualenvs/achievement2-practice/bin/get_env_details
(achievement2-practice) cjhart34@Coreys-MacBook-Air testscripts %
```

6. Install Django and verify the installation by checking the version. Then:

   ○ Take a screenshot of the terminal with the command and version.

   ○ Paste it into your answers document.

```
(web-dev) cjhart34@Coreys-MacBook-Air testscripts % pip install django
Collecting django
  Downloading Django-4.1.7-py3-none-any.whl (8.1 MB)
                                         ──────── 8.1/8.1 MB 1.3 MB/s eta 0:00:00
Collecting sqlparse>=0.2.2
  Downloading sqlparse-0.4.3-py3-none-any.whl (42 kB)
                                         ──────── 42.8/42.8 kB 1.7 MB/s eta 0:00:00
Collecting backports.zoneinfo
  Downloading backports.zoneinfo-0.2.1-cp38-cp38-macosx_10_14_x86_64.whl (35 kB)
Collecting asgiref<4,>=3.5.2
  Downloading asgiref-3.6.0-py3-none-any.whl (23 kB)
Installing collected packages: sqlparse, backports.zoneinfo, asgiref, django
Successfully installed asgiref-3.6.0 backports.zoneinfo-0.2.1 django-4.1.7 sqlparse-0.4.3

[notice] A new release of pip available: 22.3.1 -> 23.0.1
[notice] To update, run: pip install --upgrade pip
(web-dev) cjhart34@Coreys-MacBook-Air testscripts % django-admin --version
4.1.7
```