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

Django is a popular framework among web developers due to many benefits such as scalability, fast development, DRY programming, and built in security. The framework also has a very large and active community so it is easy to find support if you run into an issue.

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.

- Instagram - processes a very large amount of ever-changing data
- Pinterest - processes lots of changing data and user interactions
- Bitbucket - uses for large supportive community and pre-written code
- Youtube - used to implement new features regularly and due to CDN support
- Nasa - uses for CDN to support high resolution videos and for security

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.
- Would use for built in security and scalability for lots of users
- You need fast deployment and the ability to make changes as you proceed.
- Would use for scalability and fast development due to pre-written code
- You need to build a very basic application, which doesn't require any database access or file operations.
- Would not use as Django is better suited for apps with database interaction
- You want to build an application from scratch and want a lot of control over how it works.
- Would not use as "Django Way" does not allow for control over small details
- You're about to start working on a big project and are afraid of getting stuck and needing additional support.
- Would use as Django has a very large and active community and docs

5.

```
mac:cf-python-1 anissabertoni$ which python3
/Library/Frameworks/Python.framework/Versions/3.13/bin/python3
```

8.

```
Successfully installed asgiref-3.8.1 django-5.1.2 sqlparse-0.5.1
(web-dev) mac:cf-python-1 anissabertoni$ django-admin --version
5.1.2
(web-dev) mac:cf-python-1 anissabertoni$ []
```

Learning Journal:

1. Suppose you're a web developer in a company and need to decide if you'll use vanilla (plain) Python for a project, or a framework like Django instead. What are the advantages and drawbacks of each?

Vanilla allows for complete and total control over any details but will take significantly longer to write, which will cost time and money. Django would be far faster to develop and would be scalable so I would not have to worry about additional features in the future breaking any old code, but I would have less control over small details.

2. In your own words, what is the most significant advantage of Model View Template (MVT) architecture over Model View Controller (MVC) architecture?

Writing MVT saves time and extra code because the framework takes care of data manipulation and the views can be rendered easily, as the data is just plugged into the templates.

3. Now that you've had an introduction to the Django framework, write down three goals you have for yourself and your learning process during this Achievement. You can reflect on the following questions if it helps:

- What do you want to learn about Django?
- How it compares to React and Angular for front end development
- What do you want to get out of this Achievement?
- More confidence to use a large array of languages and frameworks
- Where or what do you see yourself working on after you complete this Achievement?
- I would like to begin applying for full-stack jobs when done with this achievement