1. Write two to three sentences on why Django is so popular among web developers.
   - ***Django tends to be popular due to its "batteries included" functionality, as everything that is needed to hit the ground running in development is included in the framework. In addition, its DRY principles and pre-packaged components allow developers to quickly build complex applications without having to write too much from scratch.***
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: Largest deployment of the Django framework managing massive amounts of data, user interaction, and content displays.***
   - ***Spotify: Powers backend services, analytics, machine learning, and (again) content display.***
   - ***Pinterest: Handles large traffic of image-sharing network using the framework to handle the backend.***
   - ***Dropbox: Ensure high performance and scalability using Django.***
   - ***Washington Post: Managing large volumes of content, and ensures scalability.***
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.
     1. ***I would use Django here, since scalability is one of Django's key benefits.***
   - You need fast deployment and the ability to make changes as you proceed.
     1. ***Django lends itself to fast development, and since its based on MVT it also lends itself to prototyping and lots of changes.***
   - You need to build a very basic application, which doesn't require any database access or file operations.
     1. ***Django is not needed here, as there is no database management required for Django to perform backend operations with.***
   - You want to build an application from scratch and want a lot of control over how it works.
     1. ***I would not use Django here, as Django includes a lot of things that has to be done the "Django way" and removes a lot of personal control.***
   - You're about to start working on a big project and are afraid of getting stuck and needing additional support.
     1. ***Django is great here. Not only is Django suitable for large projects, but its also open source and has a big community of developers, making it easy to get help and support online if needed.***
4. Python version:

```
PS C:\Users\carlo\documents\CF\Python> python --version
Python 3.8.7
```

5. Virtual environment:

```
PS C:\Users\carlo\documents\CF\Python> mkvirtualenv achievement2-practice
created virtual environment CPython3.8.7.final.0-64 in 344ms
  creator CPython3Windows(dest=C:\Users\carlo\Envs\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=C:\Users\carlo\
AppData\Local\pypa\virtualenv)
    added seed packages: pip==25.0.1, setuptools==75.3.2, wheel==0.45.1
  activators BashActivator,BatchActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator
PS C:\Users\carlo\documents\CF\Python> workon acheivement2-practice

    virtualenv "acheivement2-practice" does not exist.
    Create it with "mkvirtualenv "
PS C:\Users\carlo\documents\CF\Python> workon achievement2-practice
PS C:\Users\carlo\documents\CF\Python>
```

6. Django:

```
PS C:\Users\carlo\documents\CF\Python> pip install Django
Collecting Django
  Using cached django-4.2.28-py3-none-any.whl.metadata (4.2 kB)
Collecting asgiref<4,>=3.6.0 (from Django)
  Downloading asgiref-3.8.1-py3-none-any.whl.metadata (9.3 kB)
Collecting backports.zoneinfo (from Django)
  Downloading backports.zoneinfo-0.2.1-cp38-cp38-win_amd64.whl.metadata (4.7 kB)
Collecting sqlparse>=0.3.1 (from Django)
  Downloading sqlparse-0.5.5-py3-none-any.whl.metadata (4.7 kB)
Collecting tzdata (from Django)
  Downloading tzdata-2025.3-py2.py3-none-any.whl.metadata (1.4 kB)
Requirement already satisfied: typing-extensions>=4 in c:\users\carlo\appdata\local\programs\python\python38\lib\site-packag
es (from asgiref<4,>=3.6.0->Django) (4.13.2)
Downloading django-4.2.28-py3-none-any.whl (8.0 MB)
   ──────────────────────────────────────── 8.0/8.0 MB 9.2 MB/s eta 0:00:00
Downloading asgiref-3.8.1-py3-none-any.whl (23 kB)
Downloading sqlparse-0.5.5-py3-none-any.whl (46 kB)
Downloading backports.zoneinfo-0.2.1-cp38-cp38-win_amd64.whl (38 kB)
Downloading tzdata-2025.3-py2.py3-none-any.whl (348 kB)
Installing collected packages: tzdata, sqlparse, backports.zoneinfo, asgiref, Django
Successfully installed Django-4.2.28 asgiref-3.8.1 backports.zoneinfo-0.2.1 sqlparse-0.5.5 tzdata-2025.3
PS C:\Users\carlo\documents\CF\Python> django-admin --version
4.2.28
```