EXP1. Installation of Python, Django, and Visual Studio Code on Windows

Installing Python:

- **1. Download Python:** Go to the official Python website and download the latest version of Python.
- **2. Run the Installer:** Open the downloaded file and run the installer. Make sure to check the box "Add Python to PATH" before clicking "Install Now".

3. Verify Installation:

- Open Command Prompt.
- Type *python* --version to check the installed version of Python.
- Type pip --version to check the installed version of pip (Python's package installer).

Installing Django:

- 1. Open Command Prompt.
- **2. Install Django using pip:** Type the following command and press Enter: python -m pip install django
- 3. Verify Installation:

Type django-admin --version to check the installed version of Django.

Installing Visual Studio Code:

- Download VS Code: Go to the Visual Studio Code website and download the latest version for Windows.
- 2. Run the Installer: Open the downloaded file and follow the installation instructions.
- 3. Launch VS Code.

EXP2. Creation of Virtual Environment, Django Project, and App

Creating a Virtual Environment:

- 1. Open Command Prompt.
- Navigate to our project directory: Use cd to change directories to where We want our project to be.

cd path\to\our\project\directory

3. Create a virtual environment:

python -m venv venvname

4. Activate the virtual environment:

venvname/Scripts/activate

We should see (venv) at the beginning of our command prompt, indicating the virtual environment is active.

Creating a Django Project:

1. Install Django in the virtual environment:

python -m pip install django

2. Create a Django project:

django-admin startproject myproject

3. Navigate to the project directory:

cd myproject

Creating a Django App:

1. Create an app within our project:

python manage.py startapp myapp

- 2. Add the app to our project:
 - Open myproject/settings.py in VS Code.
 - Add 'myapp', to the INSTALLED APPS list.

Running the Django Development Server:

1. Run the development server:

python manage.py runserver

2. Open a web browser and navigate to http://127.0.0.1:8000/ to see our Django project running.