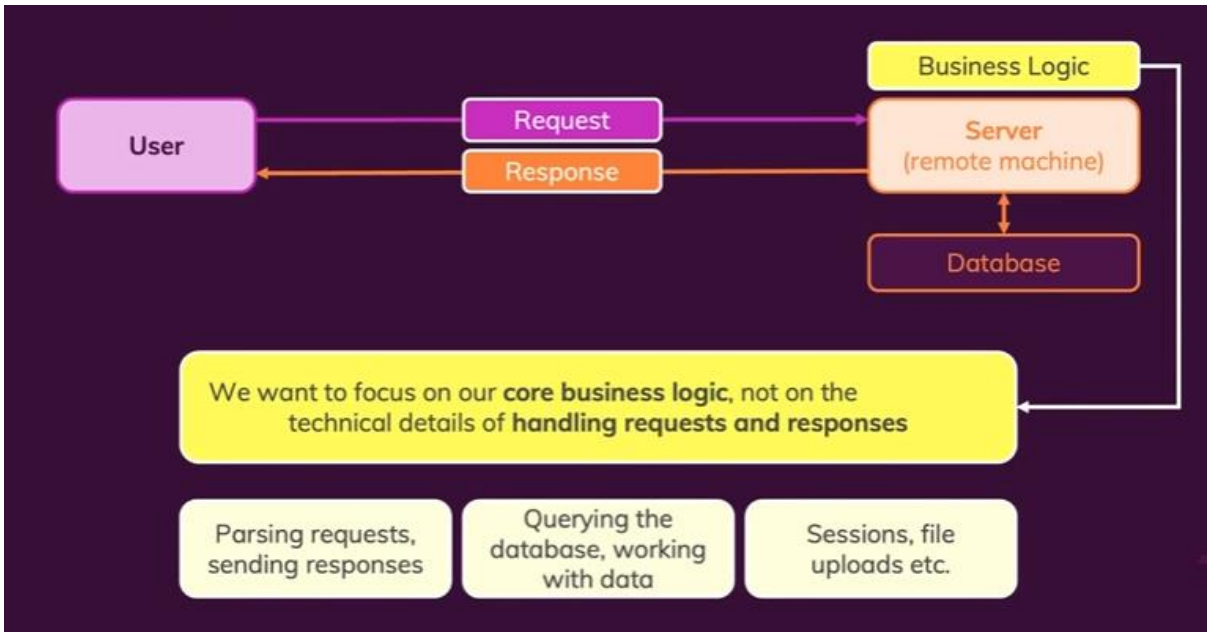
Lab-2 Task

1. **Comparative Study on MVC and MVT architectures.**

Why Django?



Configuring and Installation of Django

1. Install Python

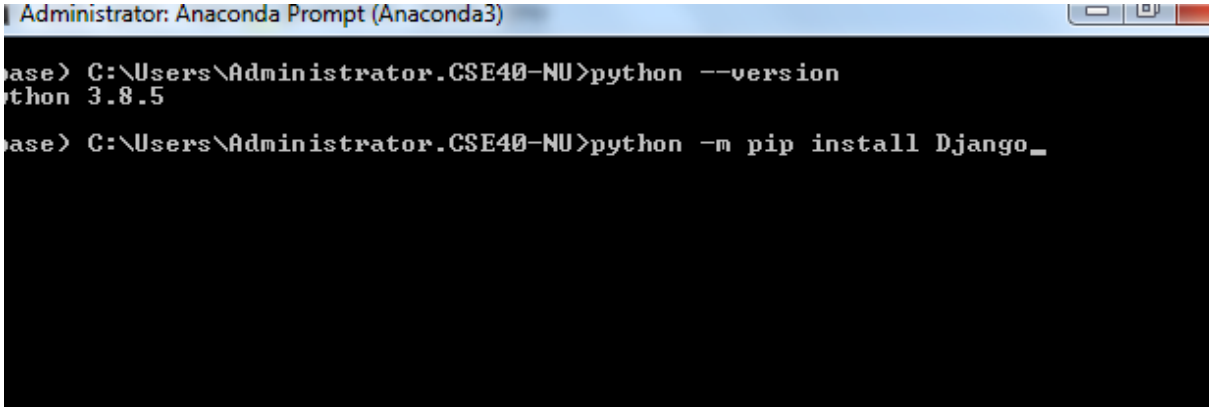
Django version	Python versions
2.2	3.5, 3.6, 3.7, 3.8 (added in 2.2.8), 3.9 (added in 2.2.17)
3.0	3.6, 3.7, 3.8, 3.9 (added in 3.0.11)
3.1	3.6, 3.7, 3.8, 3.9 (added in 3.1.3)
3.2	3.6, 3.7, 3.8, 3.9

For each version of Python, only the latest micro release (A.B.C) is officially supported. You can find the latest micro version for each series on the Python download page.

The latest version of Python 3 is recommended.

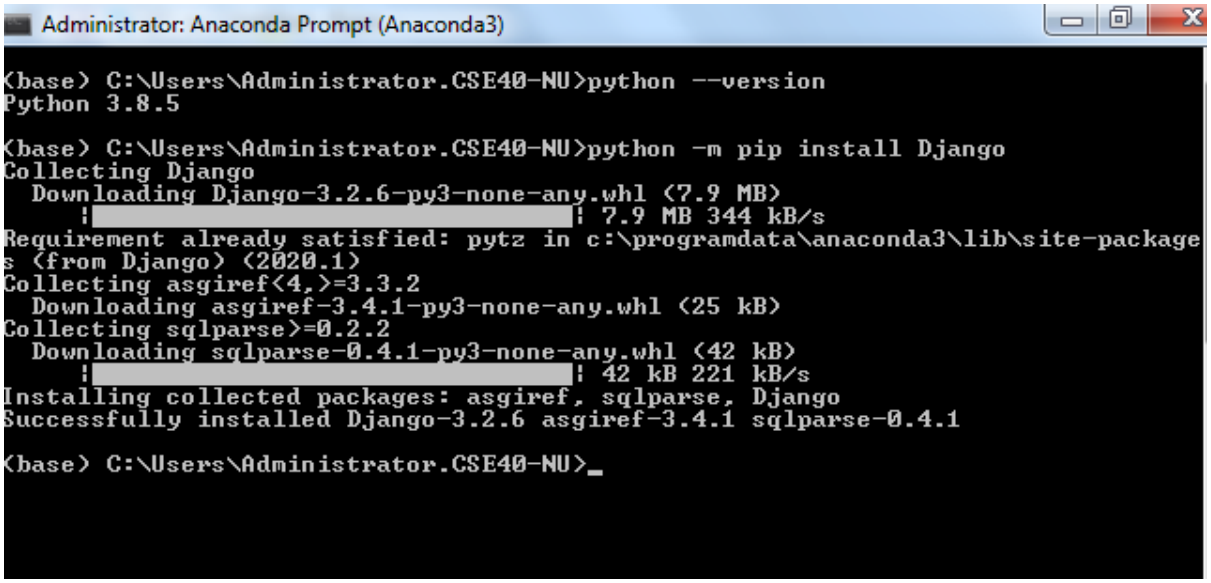
2. **Open prompt (Ensure you have internet connection working)**

Check version of Python, with the command *python --version*



For installing Django use command, *python –m pip install Django*

Once Django is installed, following things will appear in command prompt:



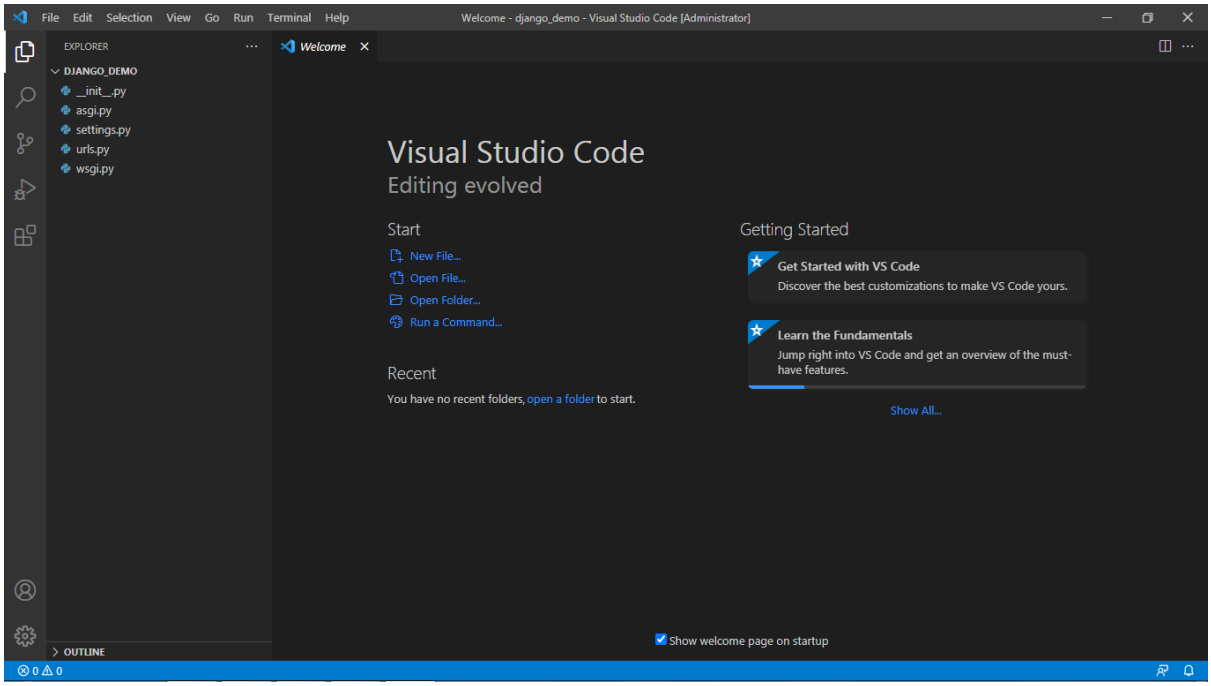
After this, use following command (This will create a new project):

django-admin startproject django_demo

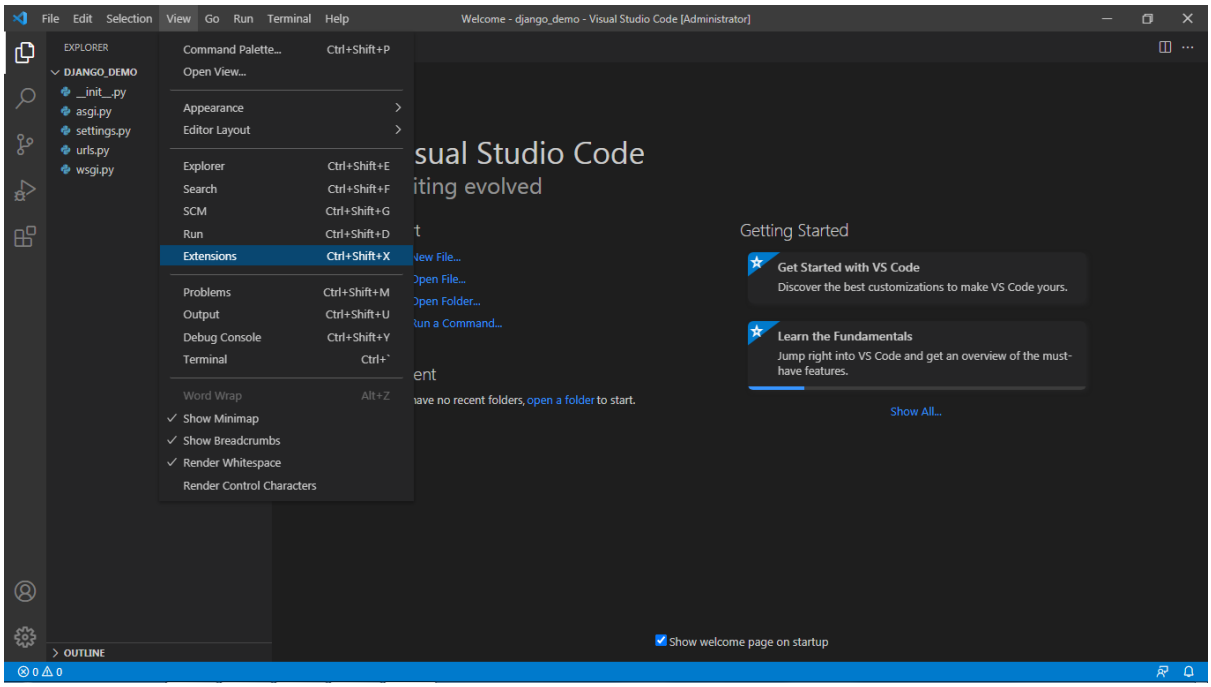
3. **Installing Editor (pycharm or visual studio code can be used. It is recommended to use visual studio code i.e vscode)**

Go to the link: https://code.visualstudio.com/ and install visual studio code in your system.

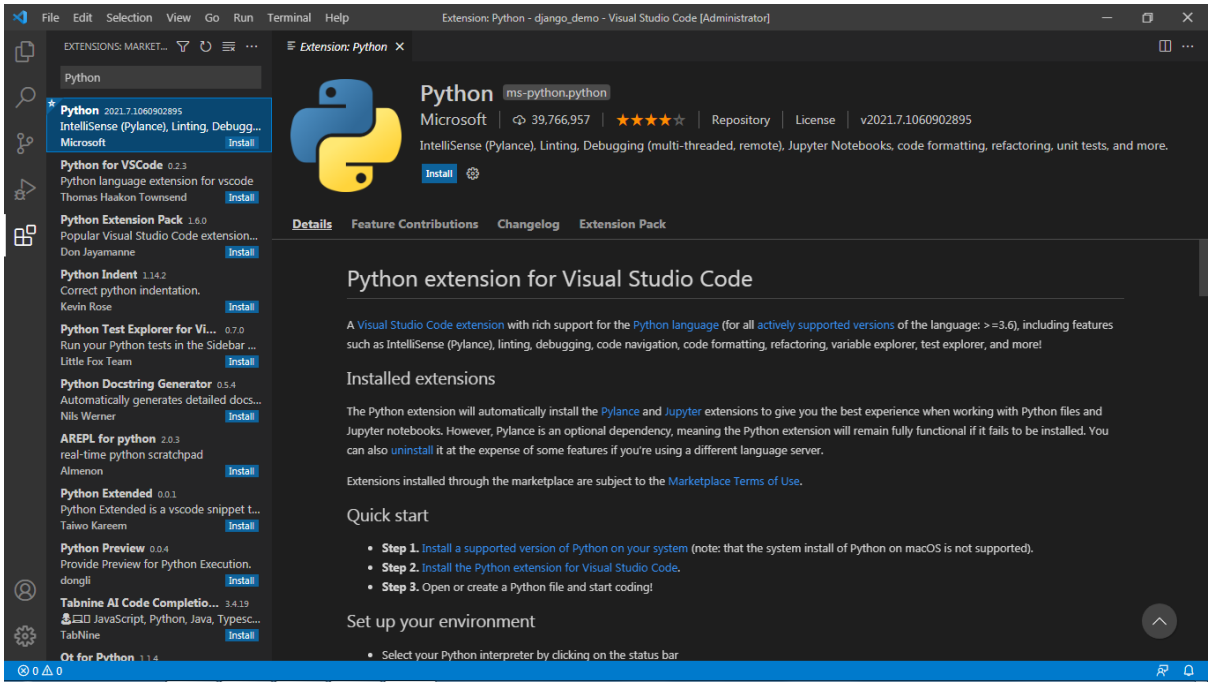
After successful installation of vscode, open it and go to the project folder created: i.e django_demo



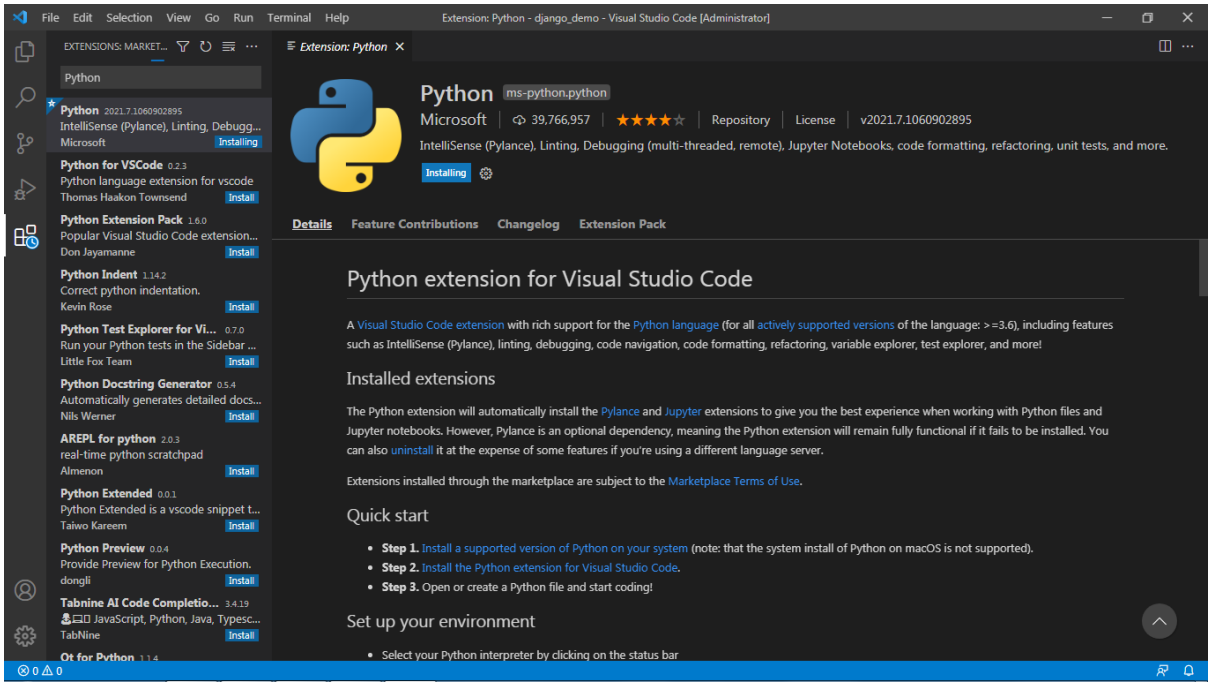
Click on View menu option and select Extensions:



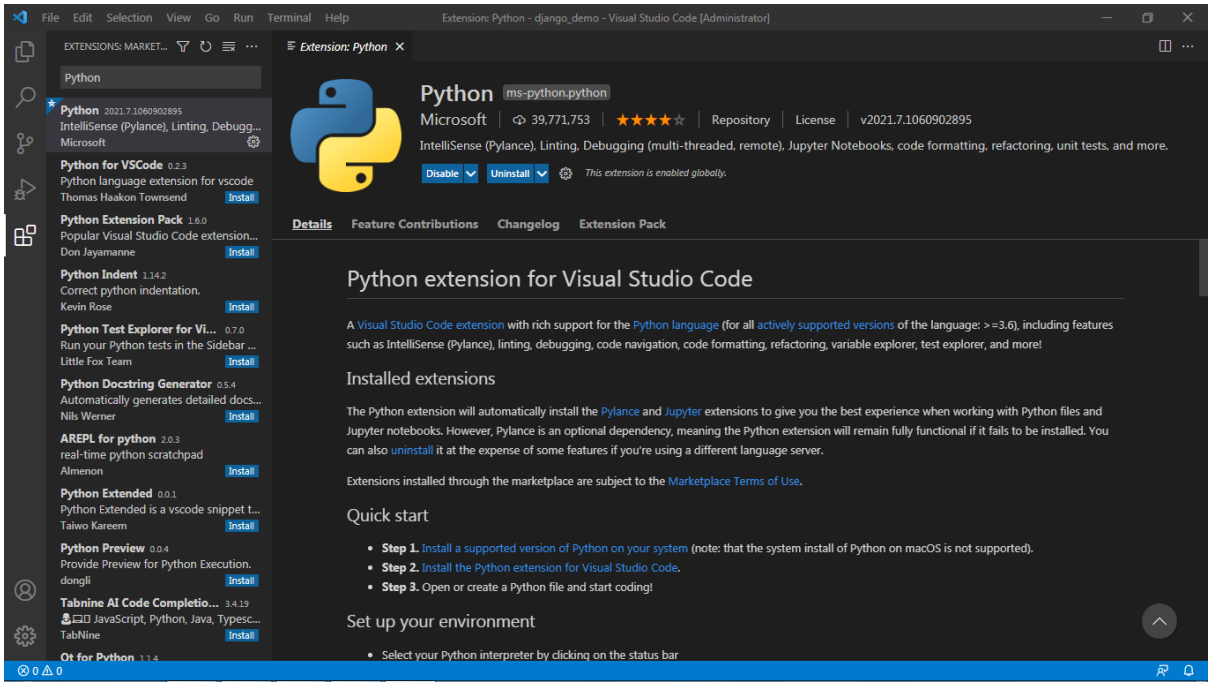
From the available extensions, select the Python extension and install it:



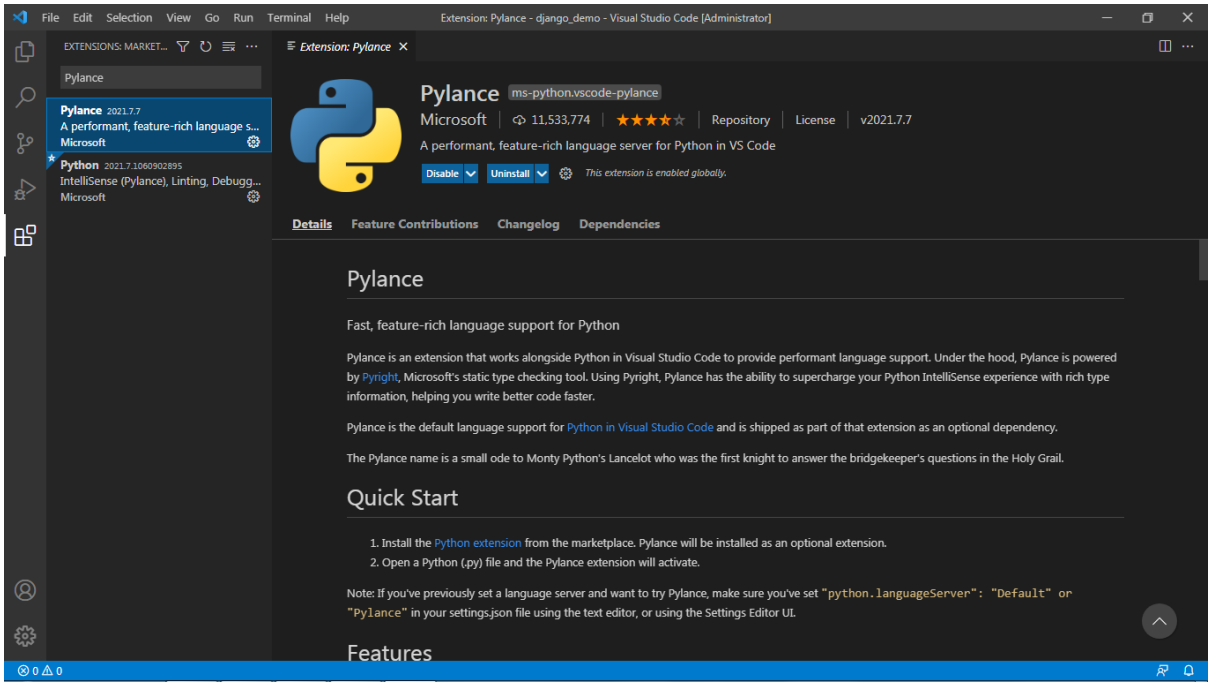
Once you click on install, it will start installing the Python extension:



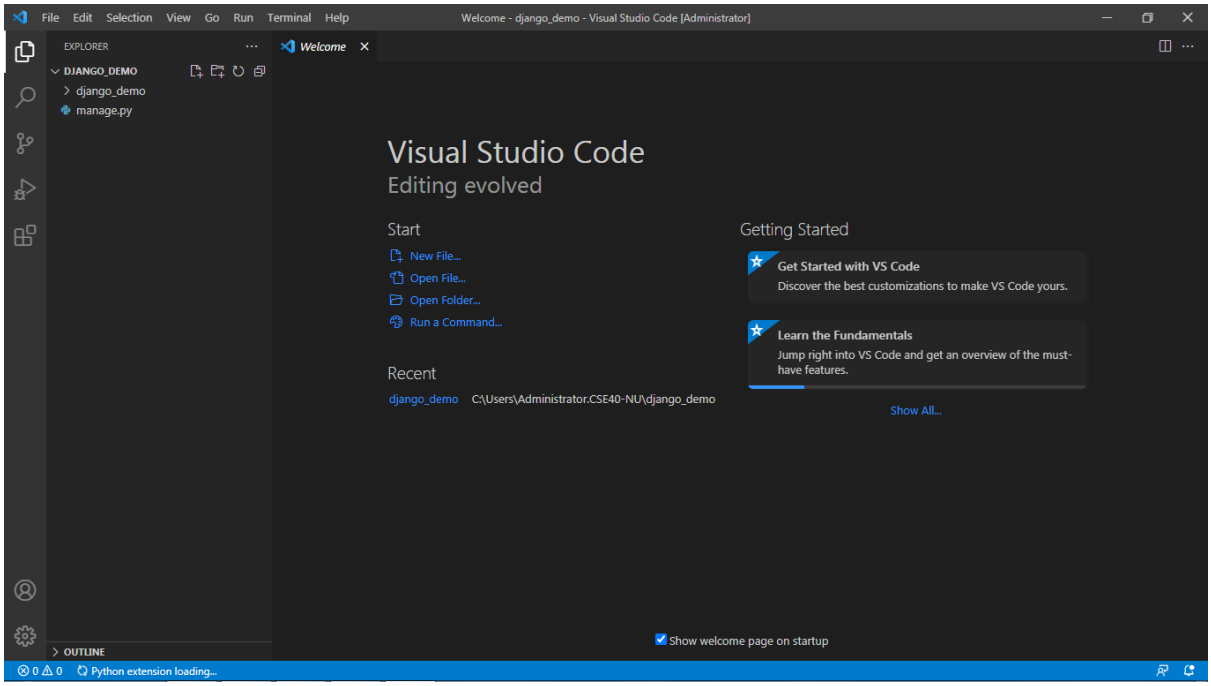
After it is successfully installed, following will appear;



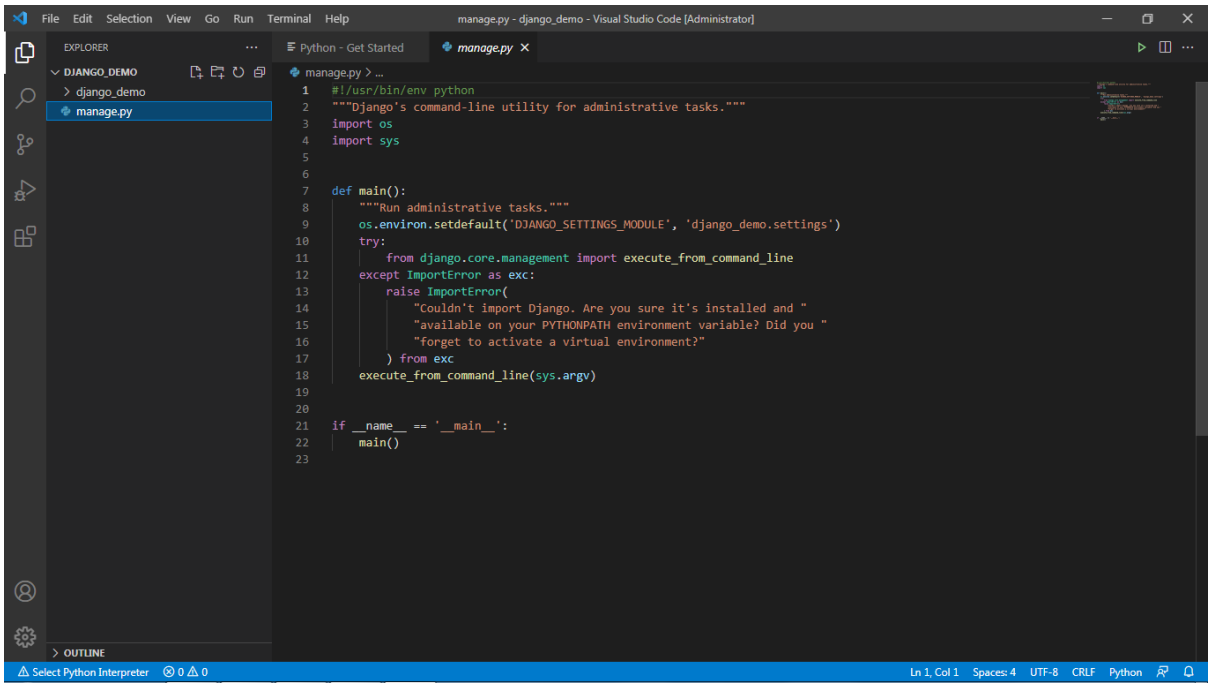
Then install Pylance extension:



4. **Go back to the folder i.e django_demo**

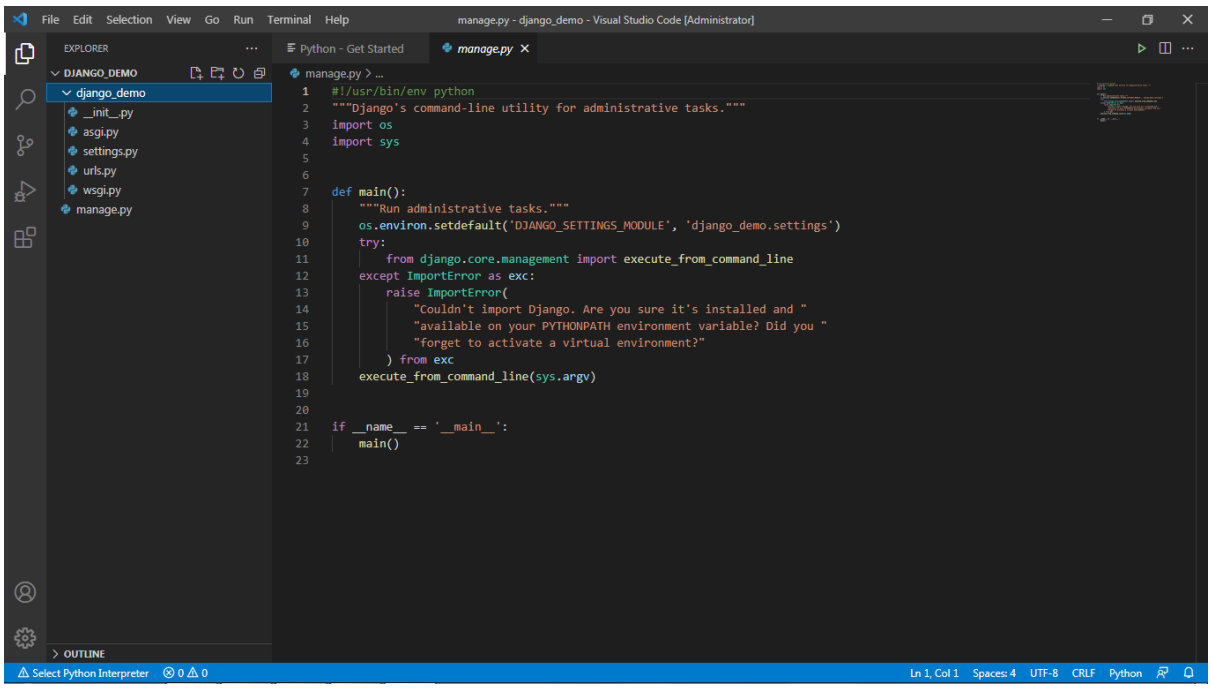


Select the python interpreter (choose the interpreter that you used to install the Django package)i.e default path and then Click on mange.py



manage.py file was created when you used django-admin command to create the django_demo project

Now select the django_demo subfolder inside the django_demo main folder, the following files will appear:

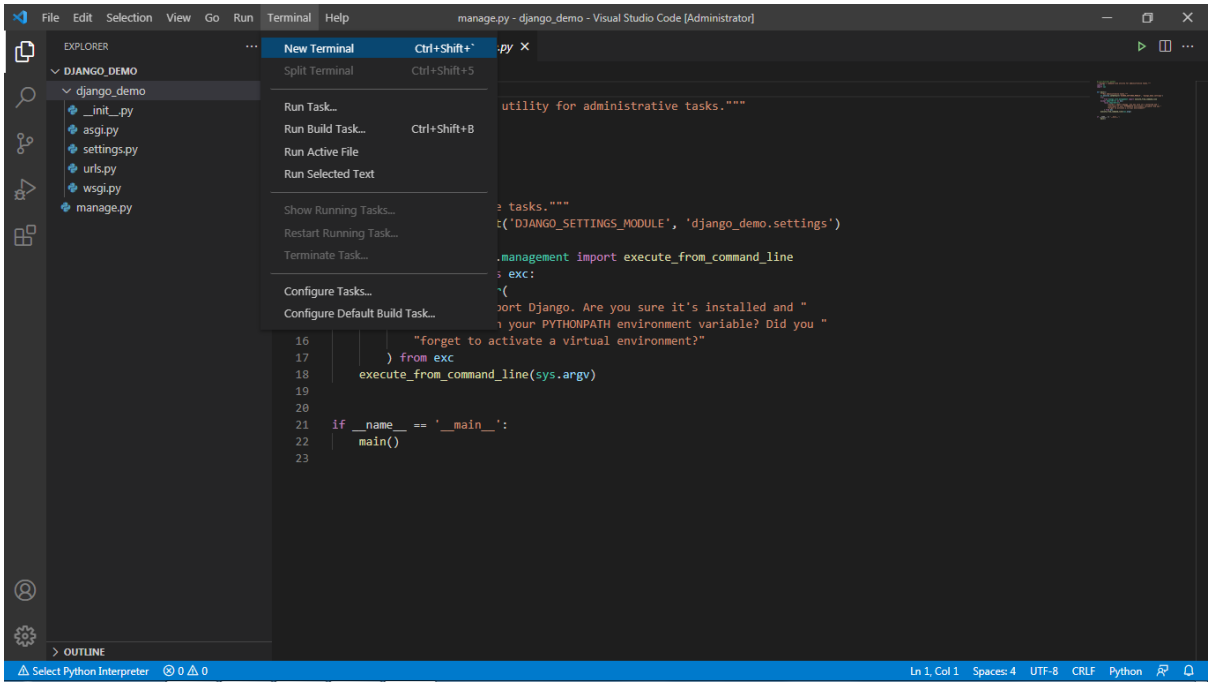


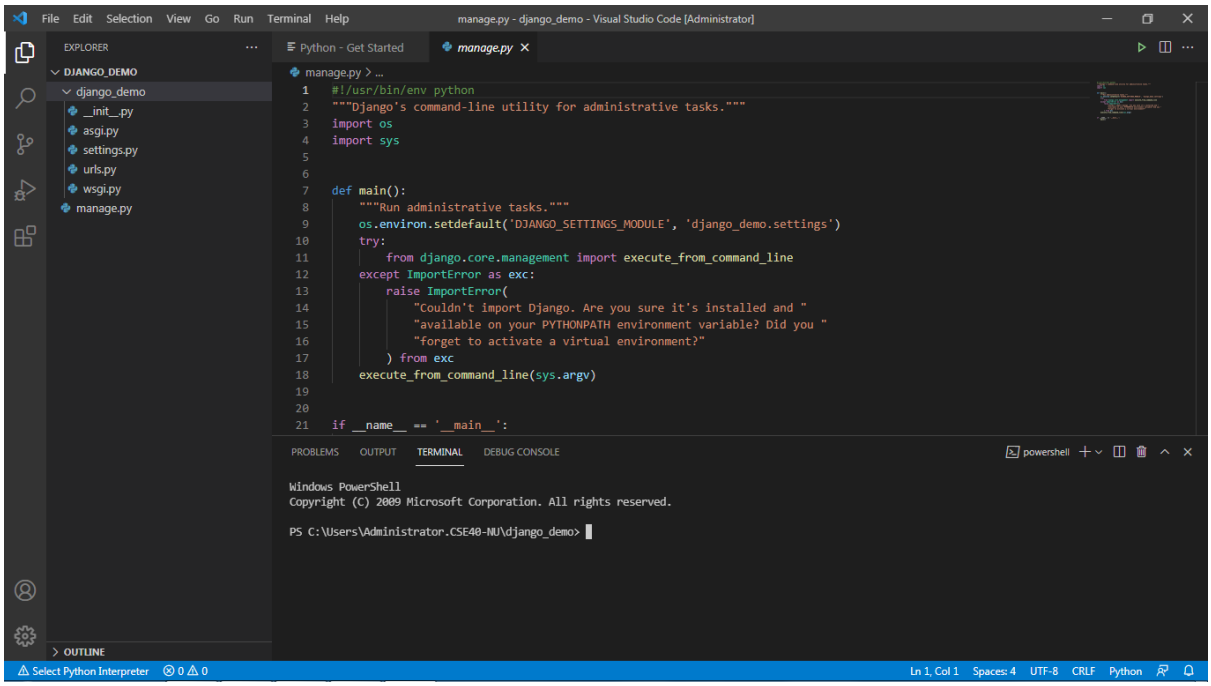
The wsgi.py and asgi.py files are related to deployment of web applications. This will be discussed later on.

The settings.py helps in configuration of the project, keep the default settings in the file as it is.

The urls.py file is of significant importance, as it will decide which url's / routes your web application will support. It is related to different pages that the web application will load.

5. Open Terminal from vscode:

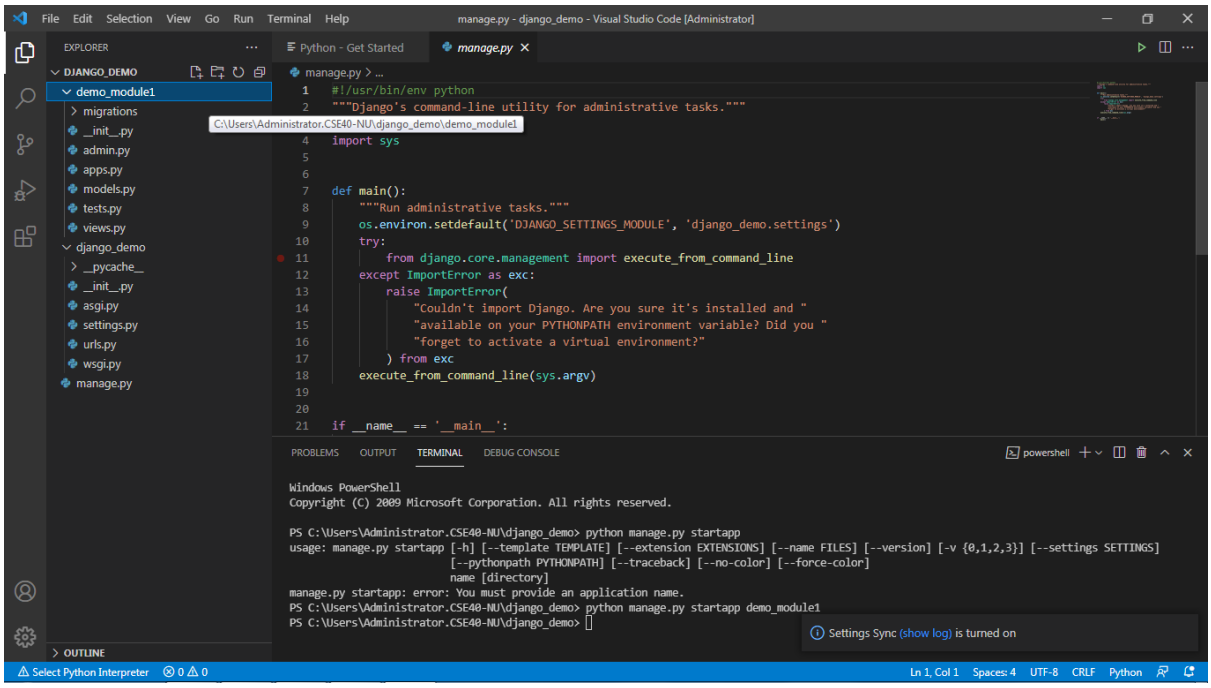




This can be used to run various commands.

Now in the terminal, run *python manage.py startapp demo_module1* **command**

This will help in creating a module/app for the Django based web application that you want to create.



All these files will be discussed in details in next lecture and lab sessions.