

## SETTING UP APPLICATION ENVIRONMENT

### CREATE A FLASK PROJECT

Flask is a micro web framework written in Python. It is classified as a microframework because it does not require particular tools or libraries. It has no database abstraction layer, form validation, or any other components where pre-existing third-party libraries provide common functions.

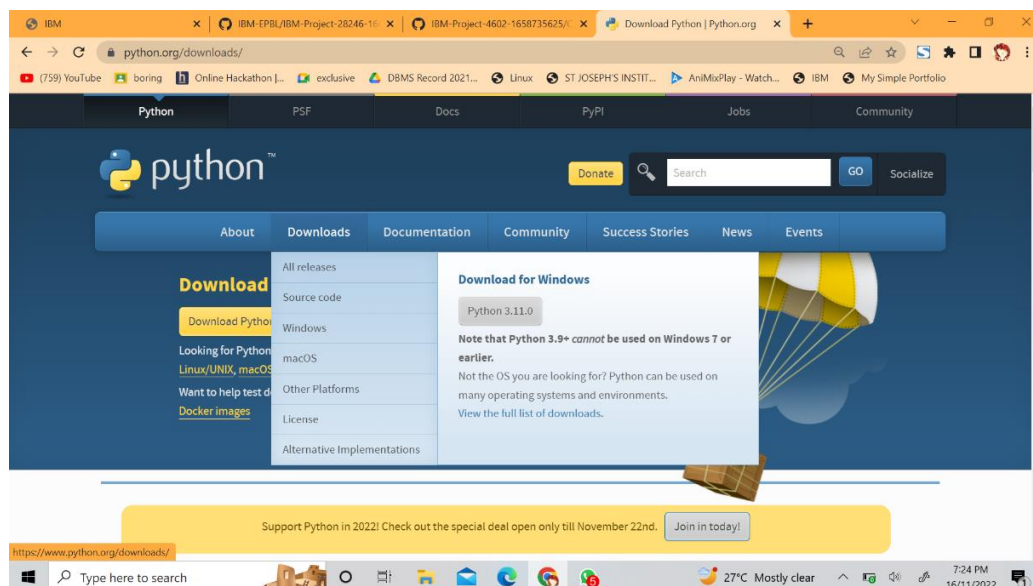
The steps to create and execute a flask program is mentioned below.

### STEPS TO CREATE A FLASK PROJECT

The following steps are followed to create the flask project.

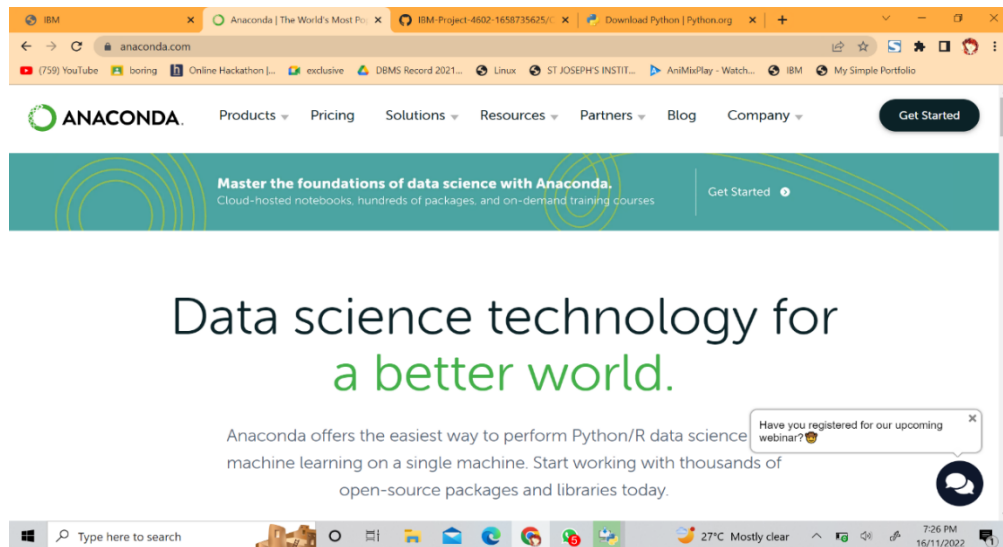
#### STEP 1: PYTHON INSTALLATION

- The latest version of python is downloaded from **PYTHON.ORG**.
- Install python by running the setup file.



#### STEP 2 : ANACONDA INSTALLATION

- The latest version of Anaconda is downloaded from their official site.  
<https://www.anaconda.com/>
- Its then installed by running the setup file.



## STEP 3 : INSTALL FLASK

Flask is installed using the command **pip install flask**.

This screenshot shows a Windows PowerShell terminal window within the Visual Studio Code editor. The terminal displays the following commands and output:

```
PS C:\Users\admin\Desktop\New folder> python --version
Python 3.11.0
PS C:\Users\admin\Desktop\New folder> pip install flask
```

The output for the 'pip install flask' command lists several requirements that are already satisfied, including Werkzeug, Jinja2, itsdangerous, click, colorama, MarkupSafe, and Jinja2. It also shows a notice about a new release of pip available (22.3 -> 22.3.1) and suggests running 'python.exe -m pip install --upgrade pip'. The Visual Studio Code interface includes the Explorer, Search, and Run and Debug panels on the left, and the Output, Debug Console, and Terminal panels on the right.This screenshot shows a Windows PowerShell terminal window within the Visual Studio Code editor, displaying the output of the 'pip install flask' command. The output lists several requirements that are already satisfied, including Werkzeug, Jinja2, itsdangerous, click, colorama, MarkupSafe, and Jinja2. It also shows a notice about a new release of pip available (22.3 -> 22.3.1) and suggests running 'python.exe -m pip install --upgrade pip'. The Visual Studio Code interface includes the Explorer, Search, and Run and Debug panels on the left, and the Output, Debug Console, and Terminal panels on the right.

## STEP 4 : CREATE THE PROGRAM

- A new python file is created .
- The program is coded and executed.

### PROGRAM

```
from flask import Flask
```

```
app = Flask(__name__)
```

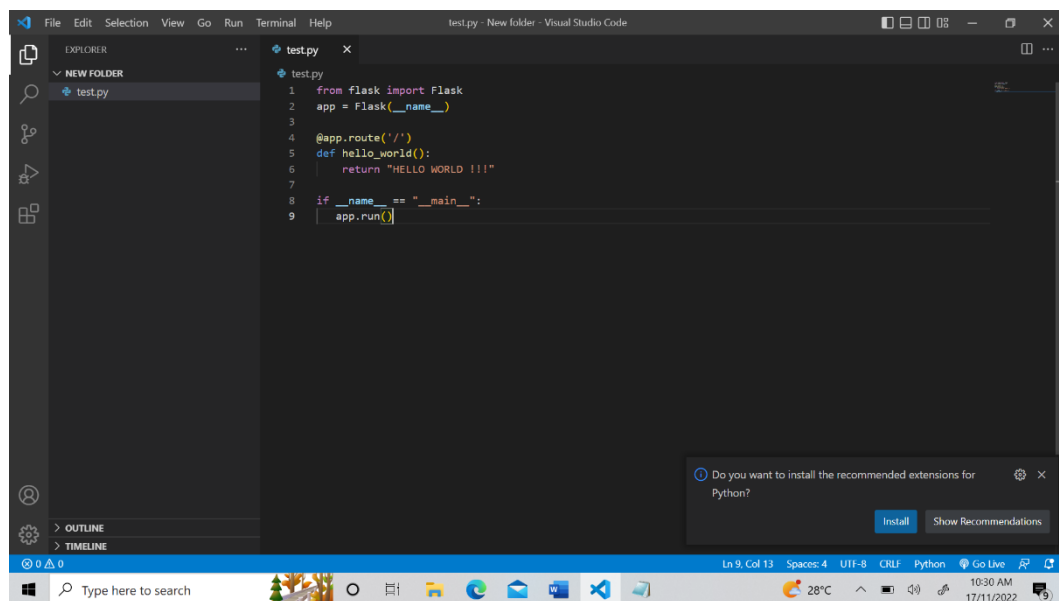
```
@app.route('/')
```

```
def hello_world():
```

```
    return "HELLO WORLD !!!"
```

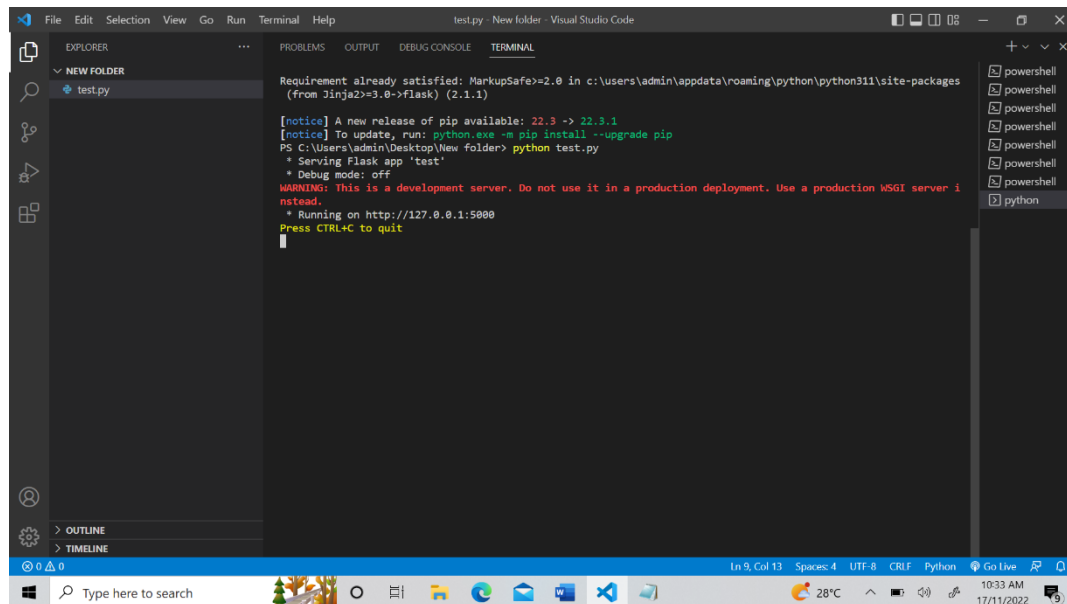
```
if __name__ == "__main__":
```

```
    app.run()
```



## STEP 5 : EXECUTION

- The program is executed using the command **python filename.py**
- An ip address is generated.



The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the output of running a Python script named 'test.py'. The output includes a message about the MarkupSafe requirement, a notice about a new release of pip, and a warning that the application is running on a development server. The application is running on http://127.0.0.1:5000.

```
Requirement already satisfied: MarkupSafe>=2.0 in c:\users\admin\appdata\roaming\python\python311\site-packages
(from Jinja2>=3.0->Flask) (2.1.1)

[notice] A new release of pip available: 22.3 -> 22.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip
PS C:\Users\admin\Desktop\New folder> python test.py
* Serving Flask app 'test'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server i
nstead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
```

## STEP 6 : OUTPUT

- The ip address is opened in a web browser.

