

MITU19IMBI0008

Major- To pull Ubuntu image from Docker registry:

```
● PS C:\Users\MIT BIO\Desktop\Apurvafask> docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
aece8493d397: Pull complete
Digest: sha256:2b7412e6465c3c7fc5bb21d3e6f1917c167358449fecac8176c6e496e5c1f05f
Status: Downloaded newer image for ubuntu:latest
docker.io/library/ubuntu:latest

What's Next?
View a summary of image vulnerabilities and recommendations → docker scout quickview ubuntu
● PS C:\Users\MIT BIO\Desktop\Apurvafask> docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
● PS C:\Users\MIT BIO\Desktop\Apurvafask> docker images
REPOSITORY    TAG       IMAGE ID   CREATED   SIZE
ubuntu        latest   e4c58958181a   7 weeks ago   77.8MB
● PS C:\Users\MIT BIO\Desktop\Apurvafask> docker login
Authenticating with existing credentials...
Login Succeeded
● PS C:\Users\MIT BIO\Desktop\Apurvafask> docker ps --all
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
● PS C:\Users\MIT BIO\Desktop\Apurvafask> docker scout quickview ubuntu
! New version 1.2.0 available (installed version is 1.0.9) at https://github.com/docker/scout-cli
v SBOM of image already cached, 144 packages indexed

Target | ubuntu:latest | 0C | 0H | 5M | 15L
digest | e4c58958181a |

What's Next?
View vulnerabilities → docker scout cves ubuntu
Include policy results in your quickview by supplying an organization → docker scout quickview ubuntu --org <organization>

root@0b260ad220a9:/# touch apurva.txt
root@0b260ad220a9:/# exit
exit
```

```
PS C:\Users\MIT BIO\Desktop\Apurvafask> docker ps -all
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
0b260ad220a9   ubuntu    "bash"    6 minutes ago   Exited (0) 26 seconds ago
PS C:\Users\MIT BIO\Desktop\Apurvafask> docker stop 0b260ad220a9
0b260ad220a9
PS C:\Users\MIT BIO\Desktop\Apurvafask> docker ps -all
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
0b260ad220a9   ubuntu    "bash"    7 minutes ago   Exited (0) About a minute ago
PS C:\Users\MIT BIO\Desktop\Apurvafask> docker images
REPOSITORY    TAG       IMAGE ID   CREATED   SIZE
ubuntu        latest   e4c58958181a   7 weeks ago   77.8MB
```

```
● PS C:\Users\MIT BIO\Desktop\Apurvafask> docker run -it ubuntu bash
root@1e0edda05730:/# echo "Hi,Apurva here!"
Hi,Apurva here!
root@1e0edda05730:/# date
Wed Nov 29 05:53:51 UTC 2023
root@1e0edda05730:/# pwd
/
root@1e0edda05730:/# ls
bin boot dev etc home lib lib32 lib64 libx32 media mnt opt proc root run sbin srv sys tmp usr var
```

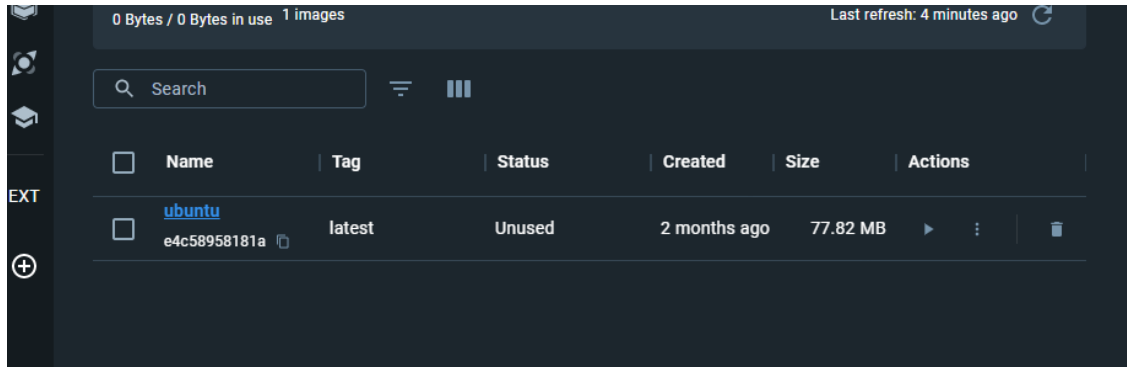
```
root@1e0edda05730:/# mkdir apurva
root@1e0edda05730:/# rm apurva.txt
rm: cannot remove 'apurva.txt': No such file or directory
root@1e0edda05730:/# touch apurva.txt
root@1e0edda05730:/# rm apurva.txt
```

```
root@1e0edda05730:/# ls
apurva bin boot dev etc home lib lib32 lib64 libx32 media mnt opt proc root run sbin srv sys tmp usr var
```

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```
root@1e0edda05730:/# cd apurva
root@1e0edda05730:/apurva# ls
```

Docker desktop:



Minor- FLASK minimal app:

App python code:

```
#hello.py
from flask import Flask

app = Flask(__name__)

@app.route("/")
def hello_world():
    return "Hello, Apurva!"
app.run()
```

VS Code terminal:

```
PS C:\Users\MIT BIO\Desktop\Apurvafask> py -m venv env
PS C:\Users\MIT BIO\Desktop\Apurvafask> env\Scripts\activate
env\Scripts\activate : File C:\Users\MIT
BIO\Desktop\Apurvafask\env\Scripts\Activate.ps1 cannot be loaded
because running scripts is disabled on this system. For more
information, see about_Execution_Policies at
https://go.microsoft.com/fwlink/?LinkID=135170.
At line:1 char:1
+ env\Scripts\activate
+ ~~~~~
+ CategoryInfo          : SecurityError: (:) [], PSSecurityExcepti
on
+ FullyQualifiedErrorId : UnauthorizedAccess
PS C:\Users\MIT BIO\Desktop\Apurvafask>
* History restored

PS C:\Users\MIT BIO\Desktop\Apurvafask> env\Scripts\activate
(env) PS C:\Users\MIT BIO\Desktop\Apurvafask>
```

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Activated through Windows PowerShell Administrator mode:

```
PS C:\WINDOWS\system32> Set-ExecutionPolicy RemoteSigned

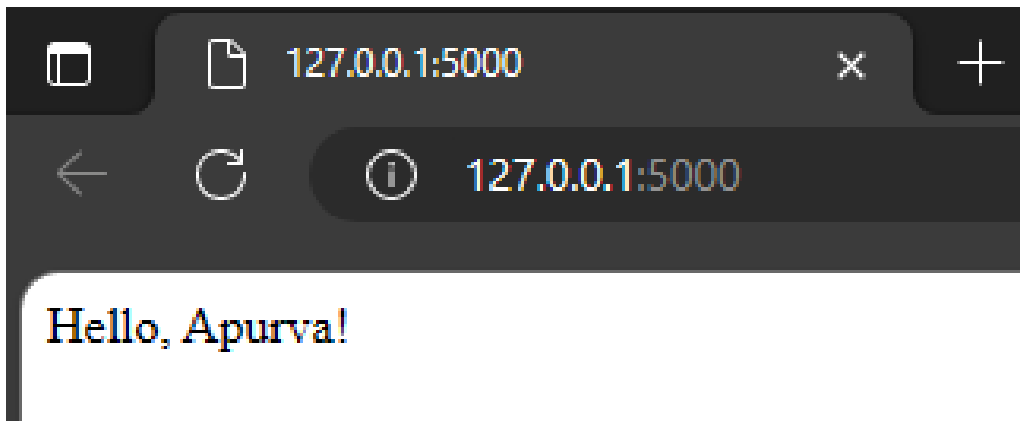
Execution Policy Change
The execution policy helps protect you from scripts that you do not trust. Changing the execution policy might expose you to the security risks described in the about_Execution_Policies help topic at https://go.microsoft.com/fwlink/?LinkID=135170. Do you want to change the execution policy?
[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend [?] Help (default is "N"): Y
PS C:\WINDOWS\system32> Set-ExecutionPolicy Unrestricted

Execution Policy Change
The execution policy helps protect you from scripts that you do not trust. Changing the execution policy might expose you to the security risks described in the about_Execution_Policies help topic at https://go.microsoft.com/fwlink/?LinkID=135170. Do you want to change the execution policy?
[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend [?] Help (default is "N"): N
```

```
• PS C:\Users\MIT BIO\Desktop\Apurvafask> env\Scripts\activate
• (env) PS C:\Users\MIT BIO\Desktop\Apurvafask> pip install flask
Requirement already satisfied: flask in c:\users\mit bio\desktop\apurvafask\env\lib\site-packages (3.0.0)
Requirement already satisfied: Werkzeug>=3.0.0 in c:\users\mit bio\desktop\apurvafask\env\lib\site-packages (from flask) (3.0.1)
Requirement already satisfied: Jinja2>=2.11.2 in c:\users\mit bio\desktop\apurvafask\env\lib\site-packages (from flask) (3.1.2)
Requirement already satisfied: click>=8.1.3 in c:\users\mit bio\desktop\apurvafask\env\lib\site-packages (from flask) (8.1.7)
Requirement already satisfied: blinker>=1.6.2 in c:\users\mit bio\desktop\apurvafask\env\lib\site-packages (from flask) (1.7.0)
Requirement already satisfied: colorama in c:\users\mit bio\desktop\apurvafask\env\lib\site-packages (from click>=8.1.3->flask) (0.4.6)
Requirement already satisfied: MarkupSafe>=2.0 in c:\users\mit bio\desktop\apurvafask\env\lib\site-packages (from Jinja2>=3.1.2->flask) (2.1.3)

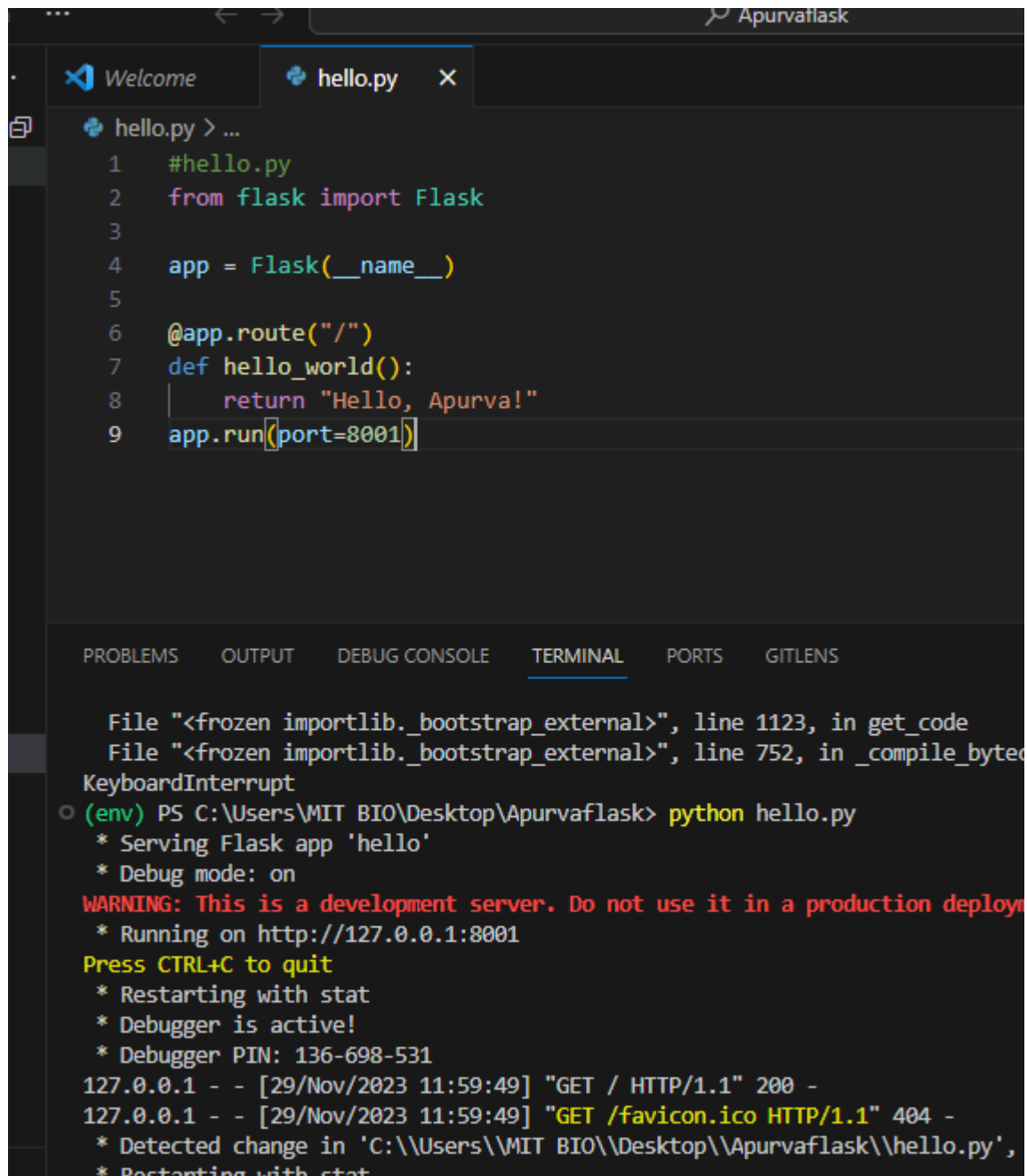
[notice] A new release of pip is available: 23.2.1 -> 23.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip
(env) PS C:\Users\MIT BIO\Desktop\Apurvafask> python hello.py
* Serving Flask app 'hello'
• * Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
127.0.0.1 - - [29/Nov/2023 09:56:22] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [29/Nov/2023 09:56:23] "GET /favicon.ico HTTP/1.1" 404 -
```

Output:



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Port change:



The image shows a Visual Studio Code editor window with a file named `hello.py` open. The code is a simple Flask application that runs on port 8001. Below the editor, the terminal window is active, showing the command `python hello.py` being executed. The output indicates that the server is running on `http://127.0.0.1:8001` and displays the message "Hello, Apurva!" in response to a GET request.

```
1 #hello.py
2 from flask import Flask
3
4 app = Flask(__name__)
5
6 @app.route("/")
7 def hello_world():
8     return "Hello, Apurva!"
9 app.run(port=8001)
```

File "<frozen importlib._bootstrap_external>", line 1123, in get_code
File "<frozen importlib._bootstrap_external>", line 752, in _compile_bytecode
KeyboardInterrupt
(env) PS C:\Users\MIT BIO\Desktop\Apurvafask> python hello.py
* Serving Flask app 'hello'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment
* Running on http://127.0.0.1:8001
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 136-698-531
127.0.0.1 - - [29/Nov/2023 11:59:49] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [29/Nov/2023 11:59:49] "GET /favicon.ico HTTP/1.1" 404 -
* Detected change in 'C:\\Users\\MIT BIO\\Desktop\\Apurvafask\\hello.py',
* Restarting with stat

