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Topic : Docker Commands

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Docker Commands :

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PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL

PS D:\INFOBELL\Docker\PythonProj\venv\Scripts> docker node

Usage: docker node COMMAND

Manage Swarm nodes

Commands:
  demote    Demote one or more nodes from manager in the swarm
  inspect   Display detailed information on one or more nodes
  ls        List nodes in the swarm
  promote   Promote one or more nodes to manager in the swarm
  ps        List tasks running on one or more nodes, defaults to current node
  rm        Remove one or more nodes from the swarm
  update    Update a node

Run 'docker node COMMAND --help' for more information on a command.
PS D:\INFOBELL\Docker\PythonProj\venv\Scripts> docker network

Usage: docker network COMMAND

Manage networks

Commands:
  connect    Connect a container to a network
  create     Create a network
  disconnect Disconnect a container from a network
  inspect    Display detailed information on one or more networks
  ls         List networks
  prune      Remove all unused networks
  rm         Remove one or more networks

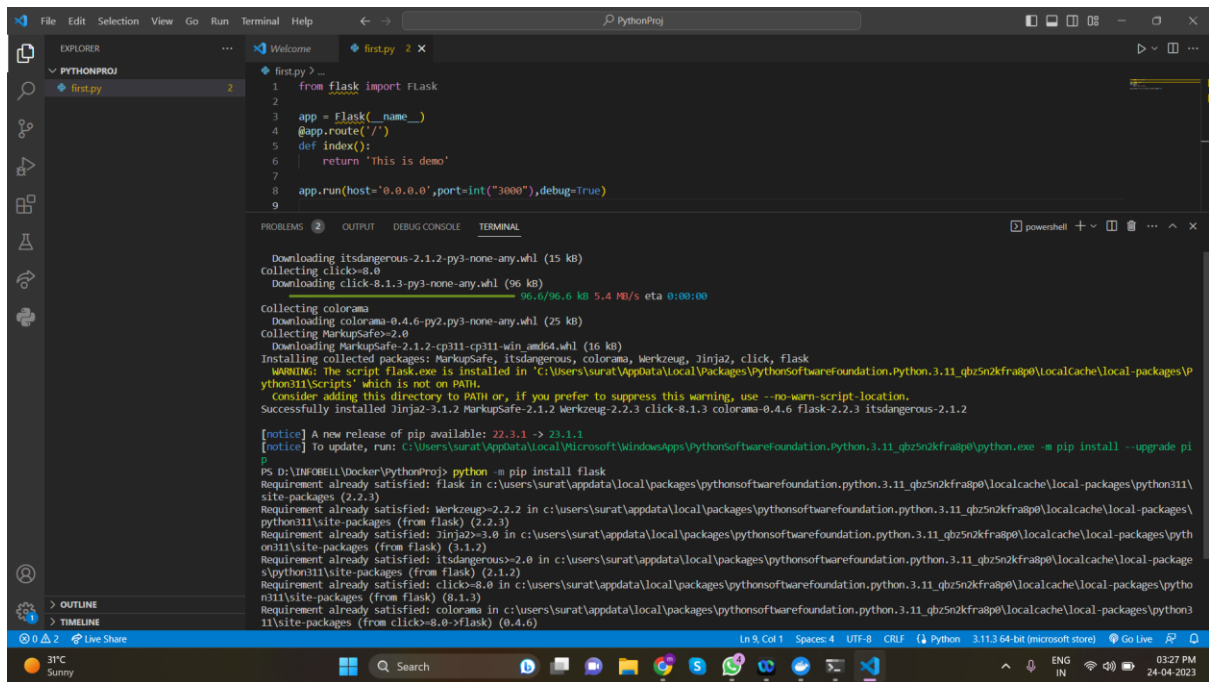
Run 'docker network COMMAND --help' for more information on a command.
PS D:\INFOBELL\Docker\PythonProj\venv\Scripts> docker swarm

Usage: docker swarm COMMAND

Manage Swarm

Commands:
  ca          Display and rotate the root CA
  init        Initialize a swarm
  join        Join a swarm as a node and/or manager
  join-token  Manage join tokens
  leave       Leave the swarm
  unlock      Unlock swarm
  unlock-key  Manage the unlock key
  update      Update the swarm

Run 'docker swarm COMMAND --help' for more information on a command.
PS D:\INFOBELL\Docker\PythonProj\venv\Scripts> 
```

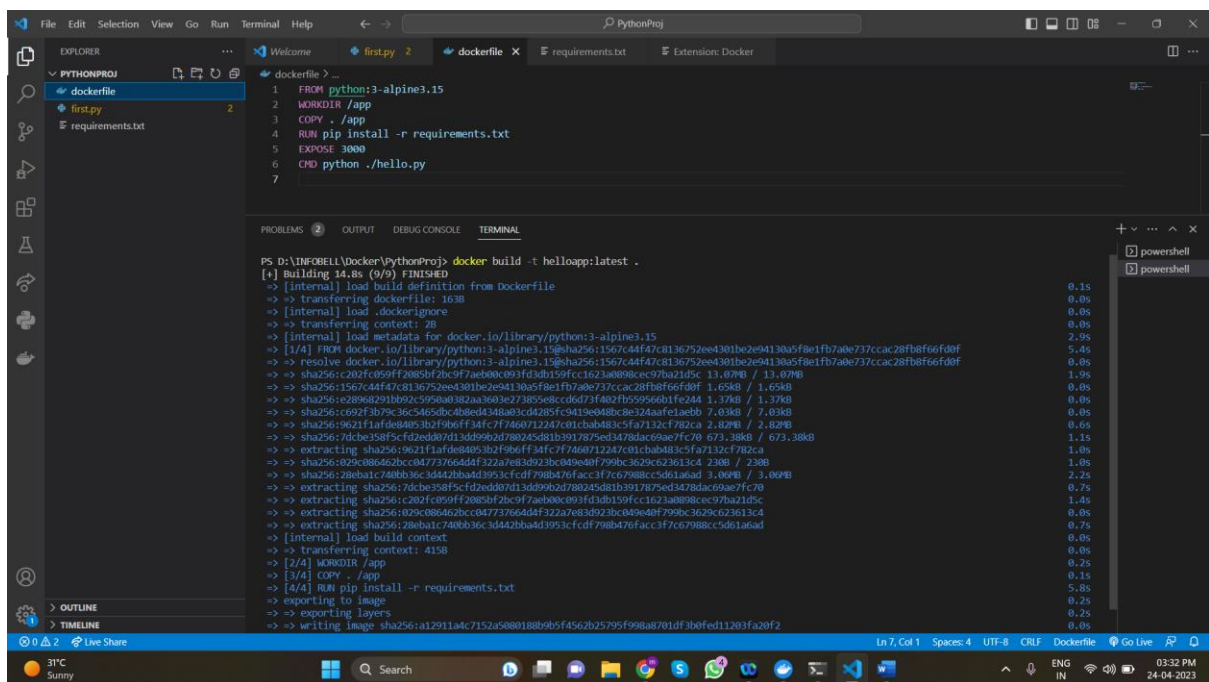


```
1 from flask import Flask
2
3 app = Flask(__name__)
4 @app.route('/')
5 def index():
6     return 'This is demo'
7
8 app.run(host='0.0.0.0', port=int("3000"), debug=True)
9
```

Downloading itsdangerous-2.1.2-py3-none-any.whl (15 kB)
Collecting click>=8.0
Downloading click-8.1.3-py3-none-any.whl (96 kB)
Collecting colorama
Downloading colorama-0.4.6-py2.py3-none-any.whl (25 kB)
Collecting MarkupSafe>=2.0
Downloading MarkupSafe-2.1.2-cp311-cp311-win_amd64.whl (16 kB)
Installing collected packages: MarkupSafe, itsdangerous, colorama, Werkzeug, Jinja2, click, flask
WARNING: The script flask.exe is installed in 'C:\Users\surat\AppData\Local\Packages\PythonSoftwareFoundation.Python.3.11_qbz5n2kfra8p0\LocalCache\local-packages\Python311\Scripts' which is not on PATH.
Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
Successfully installed Jinja2-3.1.2 MarkupSafe-2.1.2 Werkzeug-2.2.3 click-8.1.3 colorama-0.4.6 flask-2.2.3 itsdangerous-2.1.2

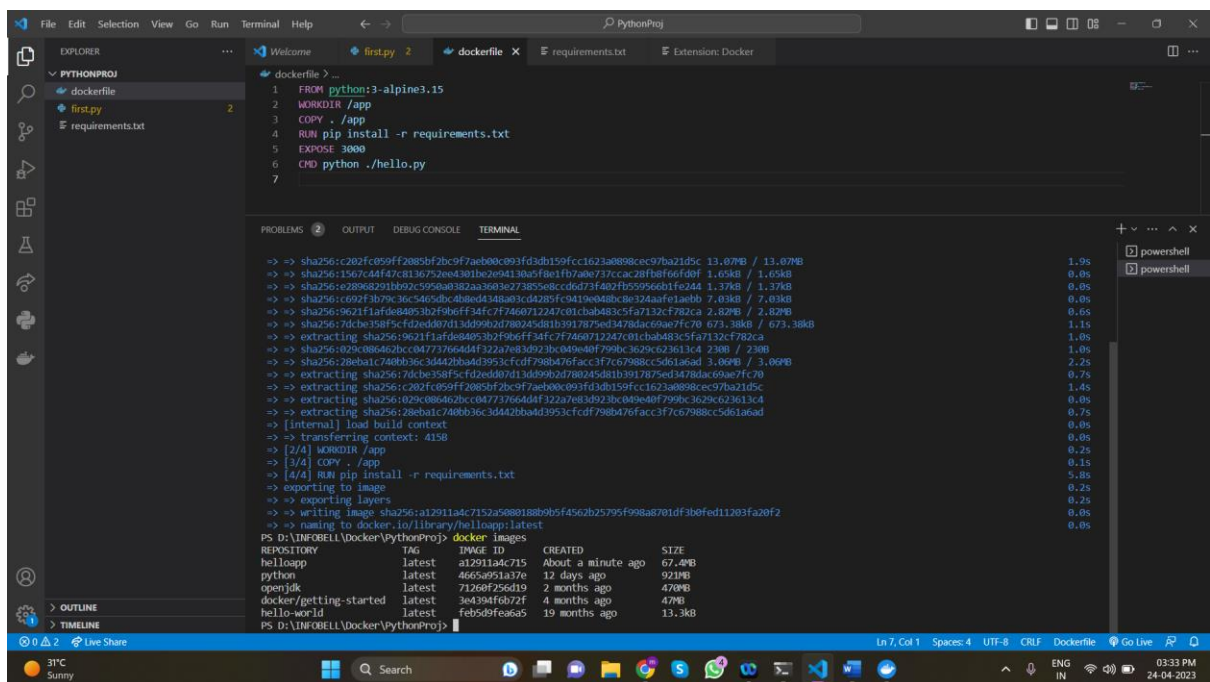
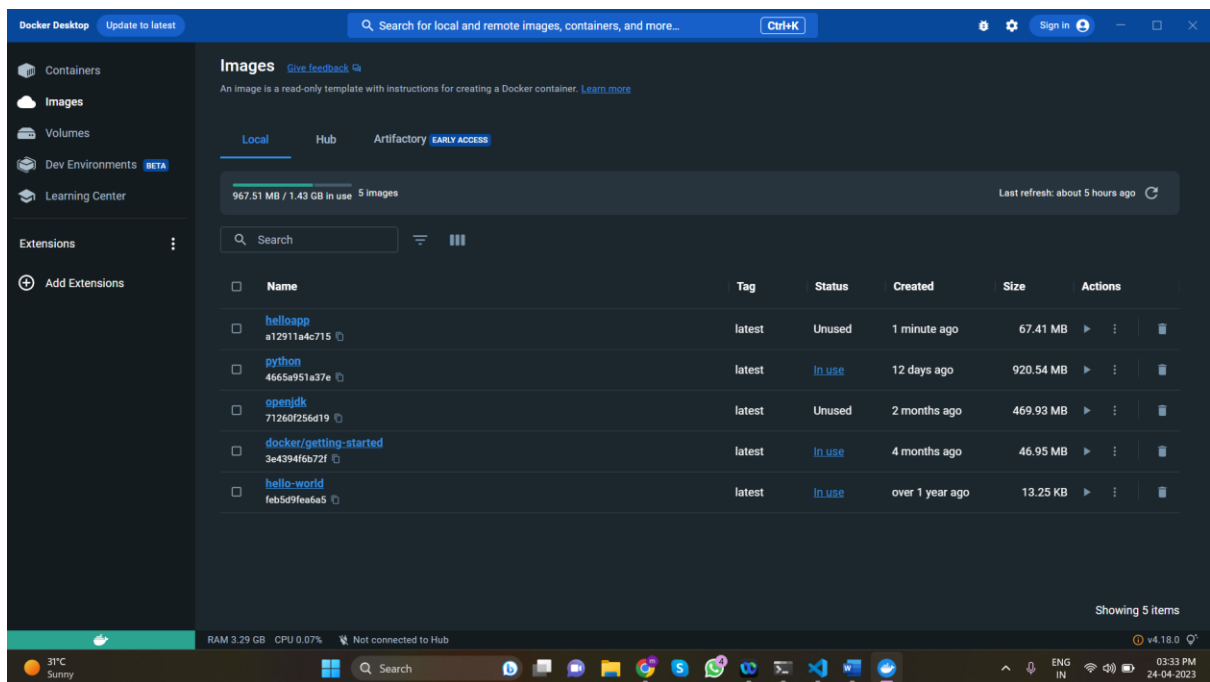
[notice] A new release of pip available: 22.3.1 -> 23.1.1
[notice] To update, run: c:\Users\surat\AppData\Local\Microsoft\WindowsApps\PythonSoftwareFoundation.Python.3.11_qbz5n2kfra8p0\python.exe -m pip install --upgrade pip

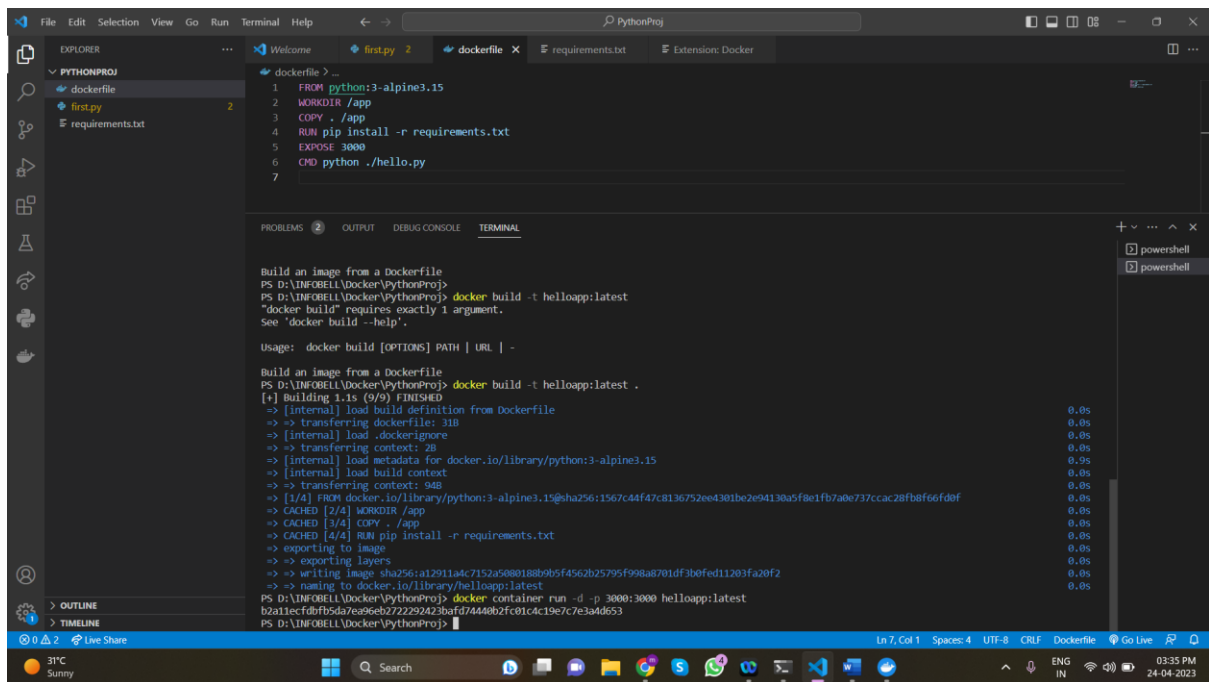
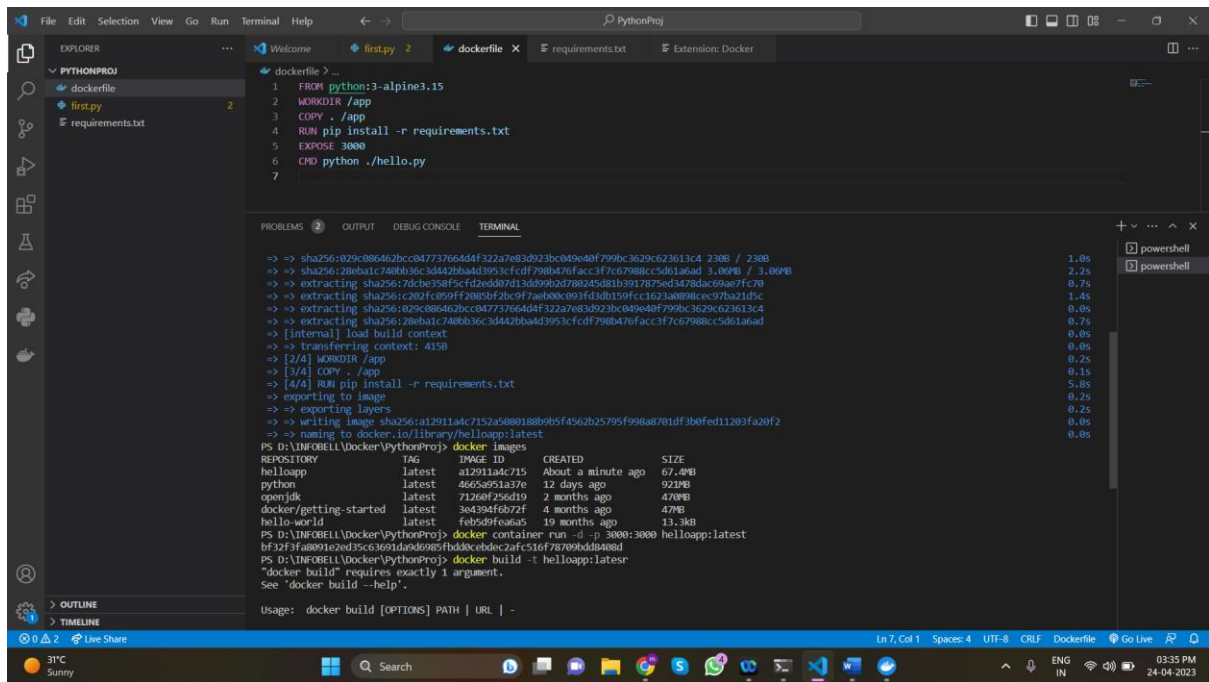
PS D:\INFORMELL\docker\pythonproj> python -m pip install flask
Requirement already satisfied: flask in c:\Users\surat\AppData\Local\packages\pythonsoftwarefoundation.python.3.11_qbz5n2kfra8p0\localcache\local-packages\python311\site-packages (2.2.3)
Requirement already satisfied: Werkzeug>=2.2.2 in c:\Users\surat\AppData\Local\packages\pythonsoftwarefoundation.python.3.11_qbz5n2kfra8p0\localcache\local-packages\python311\site-packages (from flask) (2.2.3)
Requirement already satisfied: Jinja2>=3.0 in c:\Users\surat\AppData\Local\packages\pythonsoftwarefoundation.python.3.11_qbz5n2kfra8p0\localcache\local-packages\python311\site-packages (from flask) (3.1.2)
Requirement already satisfied: itsdangerous>=2.0 in c:\Users\surat\AppData\Local\packages\pythonsoftwarefoundation.python.3.11_qbz5n2kfra8p0\localcache\local-packages\python311\site-packages (from flask) (2.1.2)
Requirement already satisfied: click>=8.0 in c:\Users\surat\AppData\Local\packages\pythonsoftwarefoundation.python.3.11_qbz5n2kfra8p0\localcache\local-packages\python311\site-packages (from flask) (8.1.3)
Requirement already satisfied: colorama in c:\Users\surat\AppData\Local\packages\pythonsoftwarefoundation.python.3.11_qbz5n2kfra8p0\localcache\local-packages\python311\site-packages (from click>=8.0->flask) (0.4.6)



```
1 FROM python:3-alpine3.15
2 WORKDIR /app
3 COPY . /app
4 RUN pip install -r requirements.txt
5 EXPOSE 3000
6 CMD python ./hello.py
7
```

PS D:\INFORMELL\docker\pythonproj> docker build -t helloapp:latest .
[*] Building 14.8s (9/9) FINISHED
-> [internal] load build definition from Dockerfile
-> [internal] transferring Dockerfile: 163B
-> [internal] load .dockerignore
-> [internal] transferring context: 2B
-> [internal] load metadata for docker.io/library/python:3-alpine3.15
-> [1/4] FROM docker.io/library/python:3-alpine3.15#sha256:1567c44f7c8136752ee4301be2e9413ba5f8e1fb7a0e737ccac28fbf66fd0f
-> resolve docker.io/library/python:3-alpine3.15#sha256:1567c44f7c8136752ee4301be2e9413ba5f8e1fb7a0e737ccac28fbf66fd0f
-> sha256:c282fc09ff2085bf2bc9f7aeb00c093fd3db159fcc1623a0898cc97ba21d5c 13.07MB / 13.07MB
-> sha256:1567c44f7c8136752ee4301be2e9413ba5f8e1fb7a0e737ccac28fbf66fd0f 1.65KB / 1.65KB
-> sha256:c282fc09ff2085bf2bc9f7aeb00c093fd3db159fcc1623a0898cc97ba21d5c 1.37KB / 1.37KB
-> sha256:c92f3b79c36c5465dbca4a4d3953cfd7f98b476facc3f7c67988cc5d61a6ad 7.03KB / 7.03KB
-> sha256:9621f1afde84053b2f966f34fc7f74660712247c01cbab483c5fa7132cf782ca 2.82MB / 2.82MB
-> sha256:7dcb358f5cfd2edd07d13d9962d780245d81b3917875ed3478d6c9ae7fc7b 673.38KB / 673.38KB
-> extracting sha256:9621f1afde84053b2f966f34fc7f74660712247c01cbab483c5fa7132cf782ca
-> sha256:922c086462bc047737664d4f322a76b3492bc049e40f799bc3629c023613c4 238B / 238B
-> sha256:28ebalc740bb36c3d442bbad3953cfd7f98b476facc3f7c67988cc5d61a6ad 3.06KB / 3.06KB
-> extracting sha256:7dcb358f5cfd2edd07d13d9962d780245d81b3917875ed3478d6c9ae7fc7b
-> extracting sha256:c282fc09ff2085bf2bc9f7aeb00c093fd3db159fcc1623a0898cc97ba21d5c
-> extracting sha256:029c086462bc047737664d4f322a76b3492bc049e40f799bc3629c023613c4
-> extracting sha256:28ebalc740bb36c3d442bbad3953cfd7f98b476facc3f7c67988cc5d61a6ad
-> [internal] load build context
-> transferring context: 415B
-> [2/4] WORKDIR /app
-> [3/4] COPY . /app
-> [4/4] RUN pip install -r requirements.txt
-> exporting to image
-> exporting layers
-> writing image sha256:a12911a4c7152a5080188b95f4562b25795f998a8701df3b0fed11203fa20f2





```
PS D:\INFOBELL\docker\pythonProj> docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS          NAMES
eb46ecf84cf7   python    "python3"               2 days ago    Up 45 minutes           pythonContainer1
PS D:\INFOBELL\docker\pythonProj>
```