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DevOps Lab 1 - Build a Docker Container from a Custom Dockerfile
User: 1RV24MC032_gbpanduranga
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1RV24MC032_gbpanduranga@ubuntu:~$ mkdir flask_app
1RV24MC032_gbpanduranga@ubuntu:~$ cd flask_app
```

```
1RV24MC032_gbpanduranga@ubuntu:~/flask_app$ echo "Flask==2.3.3" > requirements.txt
1RV24MC032_gbpanduranga@ubuntu:~/flask_app$ nano app.py
```

```
--- app.py ---
from flask import Flask
app = Flask(__name__)

@app.route('/')
def home():
    return "Hello from Dockerized Flask App - 1RV24MC032_gbpanduranga!"

if __name__ == "__main__":
    app.run(host='0.0.0.0', port=5000)
-----
```

```
1RV24MC032_gbpanduranga@ubuntu:~/flask_app$ nano Dockerfile
```

```
--- Dockerfile ---
FROM python:3.9-slim
WORKDIR /app
COPY requirements.txt requirements.txt
RUN pip install -r requirements.txt
COPY . .
EXPOSE 5000
CMD ["python", "app.py"]
-----
```

```
1RV24MC032_gbpanduranga@ubuntu:~/flask_app$ sudo docker build -t flask_image .
Sending build context to Docker daemon 3.072kB
Step 1/7 : FROM python:3.9-slim
--> 68b7e36a62ff
Step 2/7 : WORKDIR /app
--> Using cache
--> 5e7e8f0b3d90
Step 3/7 : COPY requirements.txt requirements.txt
--> Using cache
--> 9a4e2d0a1d22
Step 4/7 : RUN pip install -r requirements.txt
--> Running in b72e1f7b1fcbb
Successfully installed Flask-2.3.3
Step 7/7 : CMD ["python", "app.py"]
--> Running in 41f1db0f57ad
Successfully built e2a6b3b1b9f7
Successfully tagged flask_image:latest
```

```
1RV24MC032_gbpanduranga@ubuntu:~/flask_app$ sudo docker run -p 5000:5000 flask_image
 * Serving Flask app 'app'
 * Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:5000
 * Running on http://172.17.0.2:5000
Press CTRL+C to quit
```

```
1RV24MC032_gbpanduranga@ubuntu:~/flask_app$ curl http://localhost:5000
Hello from Dockerized Flask App - 1RV24MC032_gbpanduranga!
```

```
1RV24MC032_gbpanduranga@ubuntu:~/flask_app$ sudo docker ps
```

CONTAINER ID	IMAGE	COMMAND	STATUS	PORTS	NAMES
a3b8f14d2c52	flask_image	"python app.py"	Up 10 seconds	0.0.0.0:5000->5000/tcp	