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Program 1: Build a Docker container from custom Docker file

Step 1: mkdir -p ~/DevOps/Program1
cd DevOps/Program1
Step 2: nano requirements.txt
Flask
Step 3:nano app.py
from flask import Flask

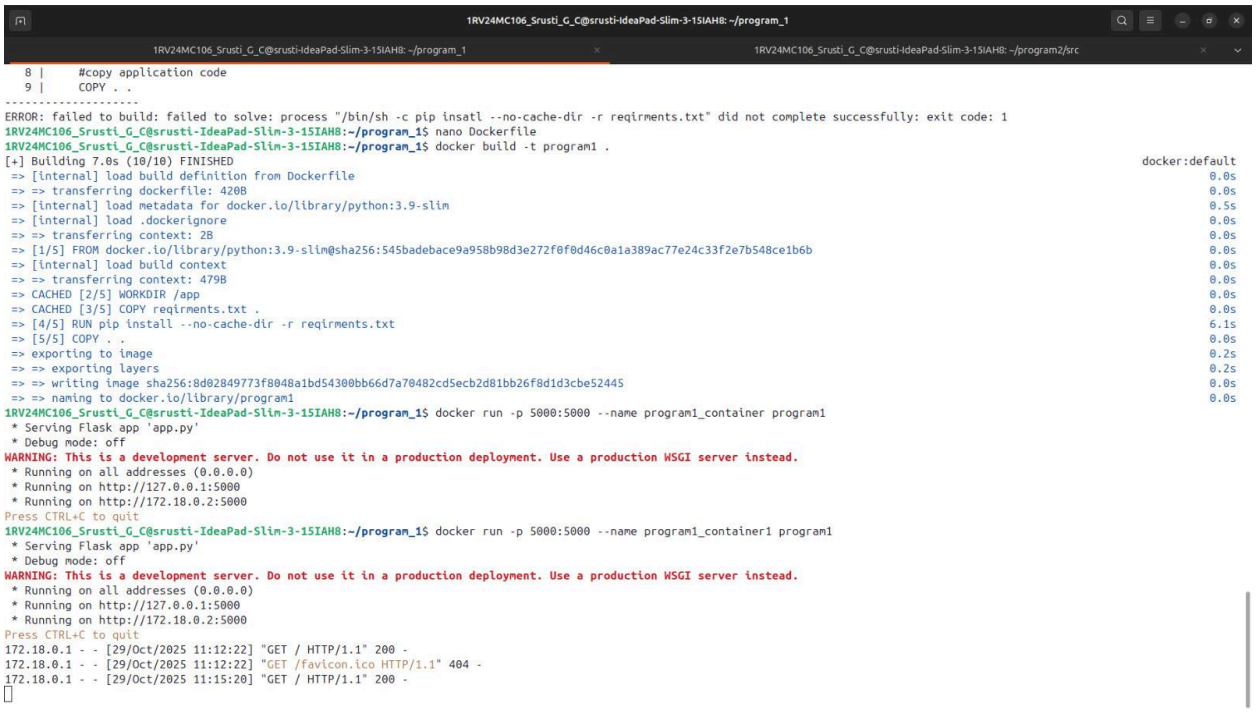
```
app = Flask(_name_)

@app.route("/")
def hello():
   return "Hello, Docker!"

if _name_ == "_main_":
   app.run(host="0.0.0.0", port=5000)
```

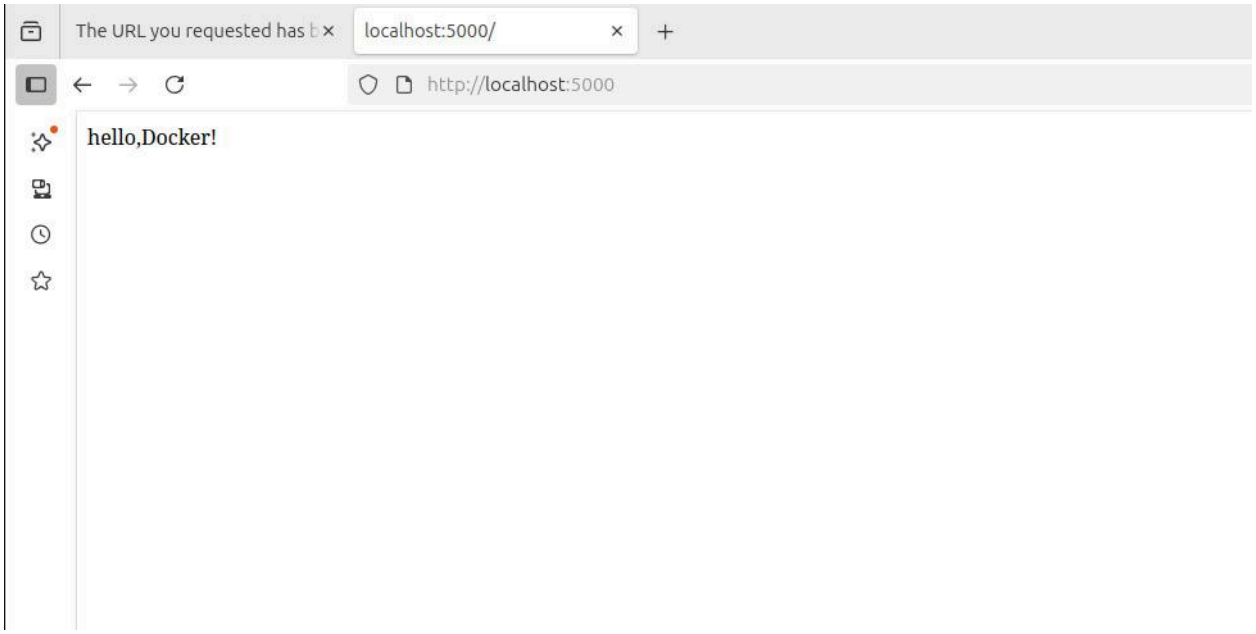
Step 4: nano Dockerfile
This is a Dockerfile
It builds a container image for a simple Flask app

```
# Use a slim Python base image
FROM python:3.9-slim

# Set the working directory inside the container
WORKDIR /app

# Copy the requirements file and install dependencies
COPY requirements.txt .
RUN pip install --no-cache-dir -r requirements.txt
```

```
# Copy the application code
COPY . .

# Set Flask environment variables
ENV FLASK_APP=app.py
ENV FLASK_RUN_HOST=0.0.0.0
ENV FLASK_RUN_PORT=5000

# Expose the port the Flask app will run on
EXPOSE 5000

# Define the command to run the Flask application
CMD ["flask", "run"]
```

Step 5: docker build -t flask-app .
Step 6:docker run -p 5000:5000 flask-app




The URL you requested has t
localhost:5000/
http://localhost:5000
hello,Docker!