1. ***Docker: A. Create a simple Hello-world python flask application and create the docker image of that Flask application.**

   B. Run the docker container from recently created image and run that docker container to 5000 port of host system.

mkdir flask_app
cd flask_app

Nano app.py

```
from flask import Flask

app = Flask(__name__)

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

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

Nano Dockerfile

```
# Use the official Python image as a base image
FROM python:3.9

# Set the working directory in the container
WORKDIR /app

# Copy the current directory contents into the container at /app
COPY . /app

# Install Flask
```

```
RUN pip install flask

# Define the command to run the application
CMD ["python", "app.py"]
```

```
docker build -t flask-hello-world .
```

```
docker run -p 5000:5000 flask-hello-world
```