SITUATION: Create and submit a docker file which would have worked docker build and it should a docker images which we could test out.  
  
TASK: Here the task to create an image for a python flask application with app.py and requirements.txt for dependencies and to build and run the container image with the port number 3000.Push the image to the docker hub.  
  
ACTION: Make a Docker file directory. Then start with the base image.  
1. Use python runtime and create start the base image using python-alphine3.15 which is the lighter version.  
FROM python:3-alphine3.15  
  
2.Then set a working directory to /app   
WORKDIR /app  
  
3.Copy the local contents into the directory /app  
COPY ./app  
  
4.Install dependencies like flask ,PIP from requirements.txt and run   
RUN pip install -r requirements.txt  
  
5.Expose the app to the port 3000   
EXPOSE 3000  
  
6.To run the base files in the working directory which is index.py as entry point   
CMD python ./index.py   
  
After setting up the image and the file we need to build the container on the image byrunning few command in the terminal. Where -t is tag which is my user’s name from docker hub shaziashaik1 and my given name.  
=>. means its working in the current directory   
=>docker build -t shaziashaik1/hey-python-flask: latest .  
=>Run the app in the detach mode -d and expose to port 3000  
=>docker container run -d -p 3000:3000 shaziashaik1/hey-python-flask: latest  
=>the output is a container with its ID number.  
Requirements: python 3.12 ,Flask  
  
RESULT: Then check the output of the image hello world on the given port number 3000.   
Docker ps -a -To list out the container attributes or details.  
Once the container is created in the docker hub, then run the index.py app in the localhost:3000