Qustion4

Clone: git clone git@github.com:devanarayanantm/python-project.git

```
root@kmaster:~# git clone git@github.com:devanarayanantm/python-project.git
Cloning into 'python-project'...
remote: Enumerating objects: 9, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 9 (delta 2), reused 1 (delta 1), pack-reused 4 (from 1)
Receiving objects: 100% (9/9), done.
Resolving deltas: 100% (2/2), done.
```

Create docker file: nano Dockerfile

```
FROM python:3.8-slim

WORKDIR /app

COPY requirements.txt .

RUN  python3 -m pip install --upgrade pip

RUN pip install -r requirements.txt

COPY . .

EXPOSE 5000

CMD [ "python", "app.py" ]
```

Create image:  docker build -t devanarayanantm/simplepythonimg .

```
root@kmaster:~/python-project#  docker build -t devanarayanantm/simplepythonimg .
[+] Building 25.4s (12/12) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 230B
=> [internal] load metadata for docker.io/library/python:3.8-slim
=> [auth] library/python:pull token for registry-1.docker.io
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [1/6] FROM docker.io/library/python:3.8-slim@sha256:1d52838af602b4b5a831beb13a0e4d073280665ea7be7f69ce2382f29c5a613f
=> [internal] load build context
=> => transferring context: 29.91kB
=> CACHED [2/6] WORKDIR /app
=> [3/6] COPY requirements.txt .
=> [4/6] RUN  python3 -m pip install --upgrade pip
=> [5/6] RUN pip install -r requirements.txt
=> [6/6] COPY . .
=> exporting to image
=> => exporting layers
=> => writing image sha256:c764506b025661f6cf61077c420b2e2315d7972360855c158a92eb174c261a9d
=> => naming to docker.io/devanarayanantm/simplepythonimg
```
Activate Win

Run the container: docker run -d --name=simplepythoncont -p 5050:5000
devanarayanantm/simplepythonimg

```
root@kmaster:~/python-project# docker run -d --name=simplepythoncont -p 5050:5000 devanarayanantm/simplepythonimg
c3856230c5986b04457a286pe72150e92b913087398829231f11c5c375633279
```

Container id: docker

```
root@kmaster:~/python-project# docker ps
CONTAINER ID   IMAGE                              COMMAND          CREATED          STATUS          PORTS                                               Activate WiNAMEows
c3856230c598   devanarayanantm/simplepythonimg    "python app.py"  47 seconds ago   Up 47 seconds   0.0.0.0:5050->5000/tcp, [::]:5050->5000/tcp    simplepythoncont
```

Working dir inside the container:

```
root@kmaster:~/python-project# docker exec -it c3856230c598 /bin/bash
root@c3856230c598:/app# pwd
/app
root@c3856230c598:/app#
```

To check the current working dir: pwd

Writable layer: cd /var/lib/docker/overlay2/