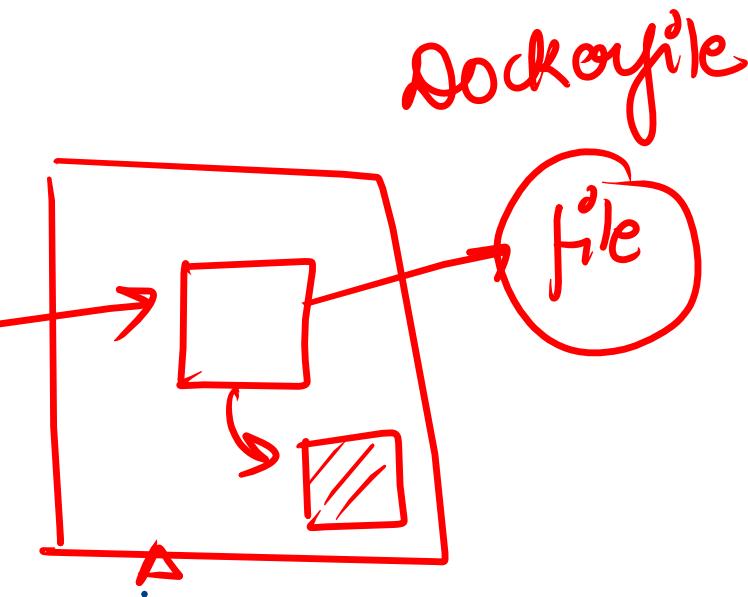
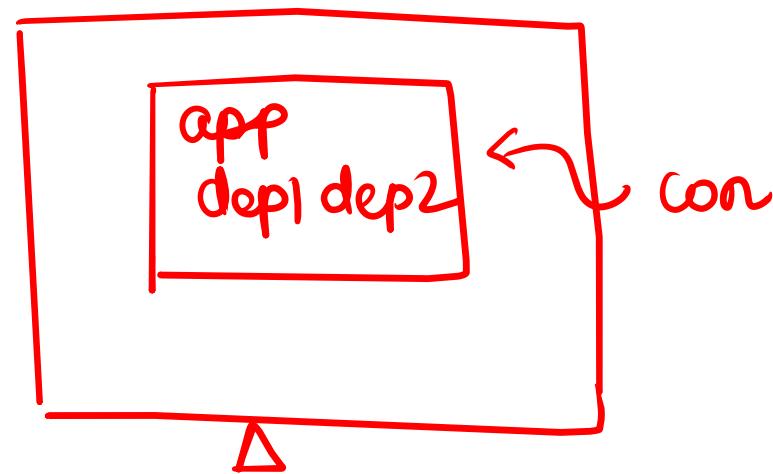
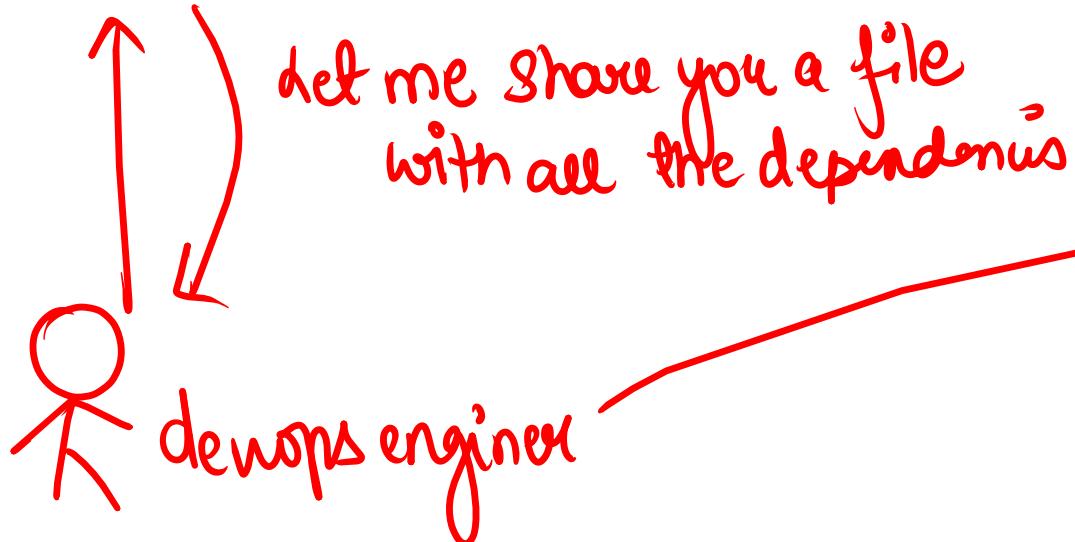


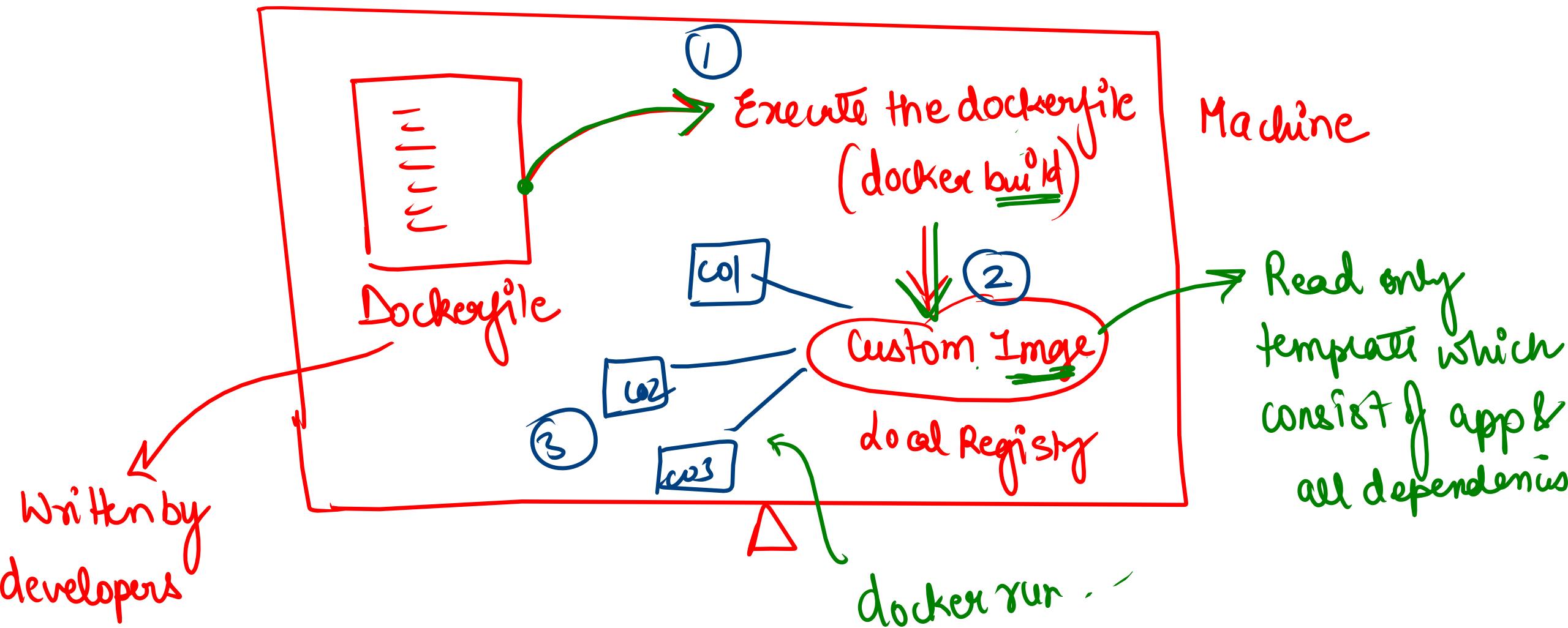
Docker - 4

★

netfix



Docker file is a text file which consist of all the instructions which is required to create a custom image from which we can create any number of containers



- 1) Developer will share the Dockerfile with us
- 2) we will run the Dockerfile via command docker build -t customimage .
it will create a custom image for us
- 3) We will use the custom image to create a container ...

```
docker run -it --name c02 customimagename /bin/bash
```



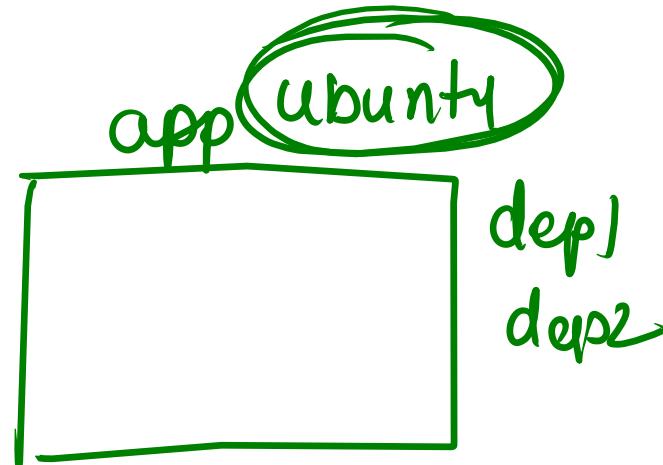
*Base Image
from
which container
would be created*

How to write Dockerfile

Docker file is written using parameters for example:

FROM : base image which will be used finally for the container .
your Dockerfile will always start FROM

e.g FROM ubuntu
 FROM alpine
 FROM mysql



RUN : if we want to execute some command when image will be created

e.g
 RUN apt update
 RUN apt install apache2 -y
 RUN mkdir mydirectory

COPY : it will copy the file from the machine inside the container when the con will be created

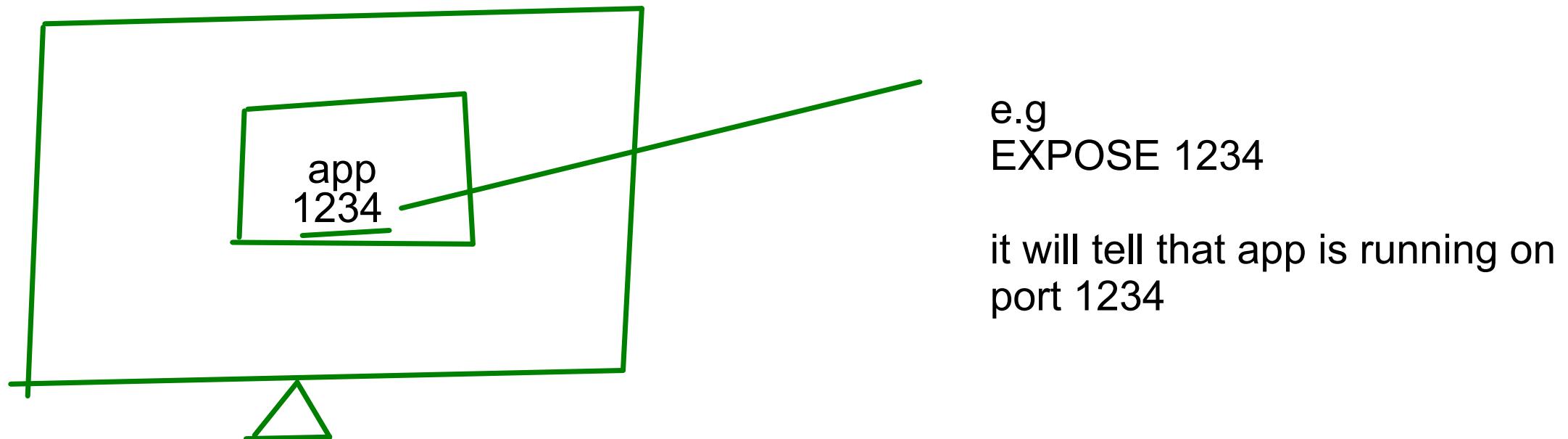
e.g
 COPY sourcefilelocation destinationfilelocation

4) MAINTAINER : here we put the details of the person who has last updated this dockerfile

eg MAINTAINER akshat <akshu20791@gmail>

maintainer does not make any changes to the container

5) EXPOSE : port on which ur application is exposed by the developer



vi Dockerfile

```
FROM ubuntu
MAINTAINER akshat <akshatdeveloper@gmail.com>
RUN apt update
RUN apt install git -y
RUN touch file1 file2
COPY akshat.txt /tmp
```

```
root@ip-172-31-13-125:/home/ubuntu# touch akshat.txt
root@ip-172-31-13-125:/home/ubuntu# ls
akshat.txt
root@ip-172-31-13-125:/home/ubuntu# █
```

vi Dockerfile

```
FROM ubuntu
MAINTAINER akshat <akshatdeveloper@gmail.com>
RUN apt update
RUN apt install git -y
RUN touch file1 file2
COPY akshat.txt /tmp
```

you need to ensure that FROM MAINTAINER RUN COPY should be in capital letters

```
root@ip-172-31-13-125:/home/ubuntu# docker build -t akshatimg .
DEPRECATEDE: The legacy builder is deprecated and will be removed in a future release.
Install the buildx component to build images with BuildKit:
https://docs.docker.com/go/buildx/
Sending build context to Docker daemon 13.82kB
Step 1/6 : FROM ubuntu
--> bf16bdcff9c9
```

t : tag

custom image name

we are creating a custom image named akshatimg from the dockerfile present in the current directory(.)

current dir where your dockerfile is present

```
root@ip-172-31-13-125:/home/ubuntu# docker images
REPOSITORY      TAG      IMAGE ID      CREATED      SIZE
akshatimg      latest    455a12a3a7b5  3 minutes ago  210MB
ubuntu          latest    bf16bdcff9c9  13 days ago   78.1MB
root@ip-172-31-13-125:/home/ubuntu#
```

in images in local registry
you will see the akshatimg created

```
root@ip-172-31-13-125:/home/ubuntu# docker run -it --name c02 akshatimg /bin/bash
root@f4559a6c0058:/#
```

We will create a container with name c02 from akshatimg (custom image) present in local registry

```
root@ip-172-31-13-125:/home/ubuntu# docker run -it --name c02 akshatimg /bin/bash
root@f4559a6c0058:/# ls
bin  boot  dev  etc  file1  file2  home  lib  lib64  media  mnt  opt  proc  root  run  sbin  srv  sys  tmp  usr  var
root@f4559a6c0058:/# cd tmp
root@f4559a6c0058:/tmp# ls
akshat.txt
root@f4559a6c0058:/tmp# git --version
git version 2.43.0
root@f4559a6c0058:/tmp#
```