Hands-On Exercises:

1. While extracting the image from the containers present context, check how the same can be modified by applying instructions from Dockerfile during commit.
2. While importing the image from the tar file having exported container image, check how you can apply the instructions from Dockerfile.
3. Find out how you can provide a different name to Dockerfile and specify the same while building docker image.
4. Normally image build operation outputs the development process. Check how you can suppress all of them and prints only image information, once it is successfully completed.
5. After converting the simple java program displaying “Hello World”, into a docker image, check the history of Docker Image and trace the layers how the image was built
6. Build an image repeatedly without making the change and identify the importance of cache. Check how you can avoid the use of Cache and rebuild image each time.
7. Normally image build uses the existing image in the local machine. But images are frequently getting updated in official repositories. Check how you can make image build to always pull the latest image, while building the image.
8. Image build operations normally create several intermediate containers. Check whether such containers are automatically removed, otherwise find out how they can be removed automatically.
9. Try writing Dockerfile to your own application requiring custom environment. Also check, how frequent changes to the environment can be automated into dockerizing the application.
10. Explore several Dockerfiles provided in official repositories on hub.docker.com