Docker Lab Subject

1. Create a simple web application (HTML page) or choose an existing web application source from the internet and write a Dockerfile to build a custom Docker image for your web application.

2. Run a container using the custom Docker image you built.

3. Access the web application running inside the container from your host machine's web browser.

4. Use Docker volumes to mount local directories containing application files (HTML pages) into the container and modify the web application and check whether the changes are reflected on the applcation.

5. Deploy a Mysql Database Container and modify your web application to use the mysql service running on the other container.

6. Demonstrate network isolation using custom networks. Create two containers of the web application and 1 container of mysql application. The 2 web application containers should be able to communicate to the mysql application container but the 2 web application containers should not be able to communicate to each others.