

Task 1. Run the ubuntu container with a mounted directory **/data**. Present a screenshot of command in terminal and its output. Create a script **/app/timestamper.sh** with a sufficiently large loop that adds the current timestamp each second into a file within the mounted directory **/data**. Output the script to the terminal and prove it with a screenshot of a command to output the script and the contents of the script. Launch the script and detach the container but not exit it. Present a screenshot of a terminal. Check the file is growing on the host using **watch** or **tail**. Prove it with a screenshot.

Task 2. Search a JupyterLab image on Docker Hub. Run a container from the JupyterLab image and connect to JupyterLab through a browser on your local machine. To succeed in the task you have to be able to map ports from the Docker container to the host. The syntax of port mapping is similar to directory mapping

```
$> docker run -p <host_port>:<container_port> <image>
```

Task 3. Rewrite **timestamper.sh** such a way it can read seconds of a lifetime as a parameter from the environment variable. To set an environment variable when you run a container, use the parameter **--env <variable>=<value>**.

Task 4. Rewrite **timestamper.sh** in such a way that it runs with default lifetime and don't fail when its environment variable contains a garbage.

Task 5. Build an image with your latest timestamp.sh and runs it. Create a Dockerfile.