

Distributed DBMS Lab

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Installation

1. Download and Install Docker Desktop (Personal):

<https://www.docker.com/products/docker-desktop/>

2. Run Docker Desktop
3. Create a new directory anywhere (eg: /home/user/hadoop or E:\hadoop)
4. Open terminal from within the newly created directory.
5. **Run the command below to download the container:**

```
docker run -p 9870:9870 -p 8088:8088 -v ./home/hadoop/data -it --name=hadoop  
macio232/hadoop-pseudo-distributed-mode
```

6. Done.

Work

1. Start the container:

```
docker start hadoop
```

2. Get inside the container:

```
docker exec -it hadoop /bin/bash
```

3. Done.

Note to Troubleshoot

- If the container exits early, then delete the container using docker desktop or docker cli and run the command in step 5 of installation again.
- The created directory is mapped to the container in /home/hadoop/data for handling data communication.
- The container is an Ubuntu 16.04 OS, so most linux commands will work.

Resources to Learn More

1. <https://medium.com/geekculture/hdfs-commands-cheat-sheet-1cd7bf22e795> (for command)
2. <https://www.youtube.com/watch?v=qgBu8Go1SyM> (word count)
3. <https://www.tutorialspoint.com/hive/index.htm> (hive QL commands)

Cryptography Lab

<https://github.com/Ankar-Kumar/cryptoLab>