

## Docker Setup:

**Step-1:** open a browser and sign in (<https://www.docker.com/>), then download the docker-desktop-installer.exe (**Windows-AMD64**) file.

**step-2:** Search for 'turn windows features on or off' from your PC's start menu.

**step-3:** See the options 'Hyper-V' and 'Windows Subsystem for Linux' and check them, then click 'OK'. The pc will required restart after few minutes.

**step-4:** Open command prompt and type-

```
> wsl --status  
> wsl --update  
> wsl --set-default-version 2  
> wsl --set-default-version 1  
> wsl --set-default-version 2
```

**step-5:** install and execute (docker-desktop-installer.exe) that you have downloaded. PC will take restart again.

step-6: Open command prompt and type-

```
> docker version  
> docker images  
> docker search mysql
```

## Docker Execution

**step-1:** open a browser and serach for '<https://docker-curriculum.com/>' and see the commands.

**step-2:** run 'ocker-desktop-installer.exe' application and open the docker terminal and execute the following commands:

```
$ docker run hello-world  
$ docker pull busybox  
$ docker run busybox  
$ docker run busybox echo "hello from busybox"  
$ docker images  
$ docker ps  
$ docker ps -a
```

**step-3:** Run hadoop in docker terminal:

```
$ docker pull macio232/hadoop-pseudo-distributed-mode
```

```
$ docker run -p 9870:9870 -p 8088:8088 -it --name=testHadoop  
macio232/hadoop-pseudo-distributed-mode
```

**step-4:** a console will open (for linux)

```
# ls
```

```
# cd home/
```

```
/home# cd hadoop/
```

```
/home/hadoop# vi student.txt
```

**Step-5:** write some thing to the student.txt file

```
Kabir 24
```

```
Bashar      25
```

```
Momin 26
```

```
Atik  24
```

```
Amir  25
```

type "esc -> : -> wq -> enter" for write and quite.

**step-6:** now open a local browser and check the ports are active  
(port:127.0.0.1:9870 and port:127.0.0.1:8088)

**step-7:** create a folder on hadoop ecosystem.

```
/home/hadoop# hdfs dfs -mkdir /samrat/
```

```
/home/hadoop# hdfs dfs -put '/home/hadoop/student.txt' /samrat
```

```
/home/hadoop# hive
```

```
hive> show databases;
```

```
hive> create database samrat-test;
```

```
hive> show databases;
```

```
hive> create database samrat_test;
```

```
hive> use samrat_test;
```

```
hive> show tables;
```

```
hive> create table student(Name string, Age int)
```

```
> Row format delimited
```

```
> Fields terminated by '\t';  
hive> show tables;  
hive> select * from student;  
hive> load data inpath /samrat/student.txt into table student;  
hive> select * from student;  
hive>
```

**step-8:**

To close the the above docker window, open a new window and type

```
hive> docker stop testHadoop
```

step-9: To reopen the the closed docker window, type

```
hive> docker container start -i testHadoop;
```