

Course: MMDS

Lab 03

MapReduce

Fill answers of the questions below in the given tables.

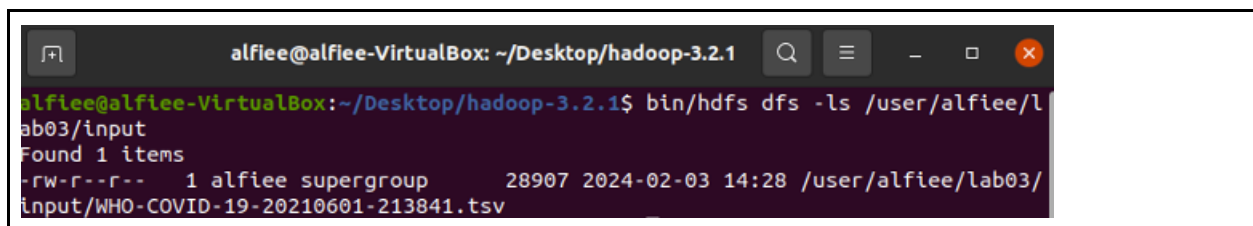
*Your screenshots must **contain commands** for required operations.*

Question 1:

Given a tsv file [WHO-COVID-19-20210601-213841.tsv](#) which is corresponding to the [WHO Coronavirus \(COVID-19\) Dashboard](#).

Students are required to create a folder, named **lab03**, in HDFS and then copy the tsv to **lab03/input/**

Take a screenshot to show the content of **lab03/input/** in HDFS

A screenshot of a terminal window titled 'alfiee@alfiee-VirtualBox: ~/Desktop/hadoop-3.2.1'. The terminal shows the command 'bin/hdfs dfs -ls /user/alfiee/lab03/input' being executed. The output indicates that 1 item was found: a file named 'input/WHO-COVID-19-20210601-213841.tsv' with permissions '-rw-r--r--', owned by 'alfiee' and 'supergroup', and a size of 28907 bytes, dated 2024-02-03 14:28.

Question 2:

Create one and only one java file, named **ASEANCaseCount.java**, to run a MapReduce job that counts the number of cumulative total cases among ASEAN countries (*South-East Asia Region in the given data table*).

The output of the MapReduce job is located in **lab03/output-java/**.

Submit the source code file following the instructions in Submission Notice.

Question 3 (*optional*):

Create a pair of Python files, named **ASEANDeathCountMapper.py** and **ASEANDeathCountReducer.py**, to run a MapReduce job that counts the number of cumulative total deaths among ASEAN countries (*South-East Asia Region in the given data table*).

The output of the MapReduce job is located in **lab03/output-python/**.

Submit the source code files following the instructions in Submission Notice.

Submission Notice

- Export your answer file as pdf
- Rename the pdf following the format:
lab03_<student number>_HoTen.pdf
E.g. lab03_123456_NguyenThanhAn.pdf
If you have not been assigned a student number yet, then use 123456 instead.
- Create a folder with the name as **<student number>_HoTen**, which contains
 - **<student number>_HoTen.pdf** → your answer
 - **java/** | → Java source code folder
| **ASEANCaseCount.java**
 - **python/** | → Python source code folder
| **ASEANDeathCountMapper.py**
| **ASEANDeathCountReducer.py**
- Compress the folder **<student number>_HoTen** in zip format and finally submit to the given form.
E.g. 123456_HoTen.zip
- Careless mistakes in filename, format, question order, etc. are not accepted (0 pts).