Course: MMDS
Lab 02
HDFS

Fill answers of the questions below in the given tables.
Your screenshots must contain commands for required operations.

Question 1:

Download and unzip lab02.zip to obtain 365 text files.
Create the folder **/user/<username>/lab02** in your HDFS
Copy the entire **lab02/** from your local filesystem to **/user/<username>/lab02** in HDFS
Take two screenshots to show your results.
For example,

```
Found 1 items
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:27 /user/ntan/lab02/lab02
Found 365 items
-rw-r--r--   1 ntan supergroup          1 2021-05-18 15:27 /user/ntan/lab02/lab02/2021_01_01.txt
-rw-r--r--   1 ntan supergroup          2 2021-05-18 15:26 /user/ntan/lab02/lab02/2021_01_02.txt
-rw-r--r--   1 ntan supergroup          2 2021-05-18 15:26 /user/ntan/lab02/lab02/2021_01_03.txt
-rw-r--r--   1 ntan supergroup          1 2021-05-18 15:26 /user/ntan/lab02/lab02/2021_01_04.txt
-rw-r--r--   1 ntan supergroup          2 2021-05-18 15:26 /user/ntan/lab02/lab02/2021_01_05.txt
-rw-r--r--   1 ntan supergroup          2 2021-05-18 15:26 /user/ntan/lab02/lab02/2021_01_06.txt
-rw-r--r--   1 ntan supergroup          1 2021-05-18 15:26 /user/ntan/lab02/lab02/2021_01_07.txt
```

Your screenshot goes here

```
drwxr-xr-x   - viethoang supergroup          0 2024-01-29 23:00 output
viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -ls /user/viethoang/lab02
Found 2 items
-rw-r--r--   2 viethoang supergroup     150569 2024-02-04 14:01 /user/viethoang/lab02/LICENSE.txt
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 15:04 /user/viethoang/lab02/lab02
viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$
```

```
viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -ls /user/viethoang/lab02/lab02
Found 365 items
-rw-r--r--   2 viethoang supergroup          1 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_01.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_02.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:03 /user/viethoang/lab02/lab02/2021_01_03.txt
-rw-r--r--   2 viethoang supergroup          1 2024-02-04 15:03 /user/viethoang/lab02/lab02/2021_01_04.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_05.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_06.txt
-rw-r--r--   2 viethoang supergroup          1 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_07.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_08.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_09.txt
-rw-r--r--   2 viethoang supergroup          1 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_10.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_11.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_12.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_13.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_14.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_15.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_16.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_17.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_18.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_19.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_20.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_21.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_22.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_23.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_24.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_25.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_26.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_27.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_28.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_29.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:03 /user/viethoang/lab02/lab02/2021_01_30.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_01_31.txt
-rw-r--r--   2 viethoang supergroup          1 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_02_01.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:03 /user/viethoang/lab02/lab02/2021_02_02.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:03 /user/viethoang/lab02/lab02/2021_02_03.txt
-rw-r--r--   2 viethoang supergroup          1 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_02_04.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_02_05.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:03 /user/viethoang/lab02/lab02/2021_02_06.txt
-rw-r--r--   2 viethoang supergroup          1 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_02_07.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_02_08.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:03 /user/viethoang/lab02/lab02/2021_02_09.txt
-rw-r--r--   2 viethoang supergroup          1 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_02_10.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_02_11.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/lab02/2021_02_12.txt
```

Question 2:

Create 12 folders, corresponding to 12 months in a year, in **/user/<username>/lab02** in HDFS.
Notice: folder names must in the format like _01, _02, …, _12
Take a screenshot to show your result.
Hint:
- loop in bash scripts
- $(printf …) for formatting strings in bash scripts.
For example,

```
Found 13 items
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:30 lab02/_01
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:30 lab02/_02
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:30 lab02/_03
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:30 lab02/_04
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:30 lab02/_05
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:30 lab02/_06
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:30 lab02/_07
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:30 lab02/_08
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:30 lab02/_09
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:30 lab02/_10
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:30 lab02/_11
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:30 lab02/_12
drwxr-xr-x   - ntan supergroup          0 2021-05-18 15:27 lab02/lab02
```

Your screenshot goes here

```
viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -ls /user/vi
ethoang/lab02
Found 13 items
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 15:19 /user/viethoang/
lab02/_01
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 15:19 /user/viethoang/
lab02/_02
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 15:19 /user/viethoang/
lab02/_03
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 15:19 /user/viethoang/
lab02/_04
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 15:19 /user/viethoang/
lab02/_05
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 15:20 /user/viethoang/
lab02/_06
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 15:20 /user/viethoang/
lab02/_07
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 15:20 /user/viethoang/
lab02/_08
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 15:20 /user/viethoang/
lab02/_09
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 15:20 /user/viethoang/
lab02/_10
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 15:23 /user/viethoang/
```

Question 3:

Text files in **lab02/** have a filename format like **YYYY_MM_DD.txt**

Move each text file in **lab02/** to the folder which is corresponding to the month in its filename. E.g. **20201_01_01.txt** to _01/

Take a screenshot to show the content in **lab02/_01/**

Take a screenshot to show the sizes (in bytes) of the 12 folders.

Hint: loop in bash scripts

For example,

```
Found 31 items
-rw-r--r--   1 ntan supergroup          1 2021-05-18 15:27 lab02/_01/2021_01_01.txt
-rw-r--r--   1 ntan supergroup          2 2021-05-18 15:26 lab02/_01/2021_01_02.txt
-rw-r--r--   1 ntan supergroup          2 2021-05-18 15:26 lab02/_01/2021_01_03.txt
-rw-r--r--   1 ntan supergroup          1 2021-05-18 15:26 lab02/_01/2021_01_04.txt
-rw-r--r--   1 ntan supergroup          2 2021-05-18 15:26 lab02/_01/2021_01_05.txt
```

```
58   58   lab02/_01
52   52   lab02/_02
58   58   lab02/_03
56   56   lab02/_04
58   58   lab02/_05
56   56   lab02/_06
58   58   lab02/_07
58   58   lab02/_08
56   56   lab02/_09
58   58   lab02/_10
56   56   lab02/_11
58   58   lab02/_12
```

Your screenshot goes here

```
viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -ls /
Found 2 items
drwx------   - viethoang supergroup          0 2024-01-29 23:05 /tmp
drwxr-xr-x   - viethoang supergroup          0 2024-02-04 14:00 /user
viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -ls /user/viethoang/lab02/_01
Found 31 items
-rw-r--r--   2 viethoang supergroup          1 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_01.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_02.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:03 /user/viethoang/lab02/_01/2021_01_03.txt
-rw-r--r--   2 viethoang supergroup          1 2024-02-04 15:03 /user/viethoang/lab02/_01/2021_01_04.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_05.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_06.txt
-rw-r--r--   2 viethoang supergroup          1 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_07.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_08.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_09.txt
-rw-r--r--   2 viethoang supergroup          1 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_10.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_11.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_12.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_13.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_14.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_15.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_16.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_17.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_18.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_19.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_20.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_21.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_22.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_23.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_24.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_25.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_26.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_27.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_28.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_29.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:03 /user/viethoang/lab02/_01/2021_01_30.txt
-rw-r--r--   2 viethoang supergroup          2 2024-02-04 15:04 /user/viethoang/lab02/_01/2021_01_31.txt
viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -du /user/viethoang/lab02
58   116   /user/viethoang/lab02/_01
52   104   /user/viethoang/lab02/_02
58   116   /user/viethoang/lab02/_03
56   112   /user/viethoang/lab02/_04
58   116   /user/viethoang/lab02/_05
56   112   /user/viethoang/lab02/_06
58   116   /user/viethoang/lab02/_07
58   116   /user/viethoang/lab02/_08
56   112   /user/viethoang/lab02/_09
58   116   /user/viethoang/lab02/_10
56   112   /user/viethoang/lab02/_11
58   116   /user/viethoang/lab02/_12
0    0     /user/viethoang/lab02/lab02
```

Question 4:

Using **cat** to display the content of all files (in month order)
- day 10th
- day 01st
- day 07th
- day 04th

Take 4 screenshots of the corresponding results above.

For example,

```
2021-05-18 15:57:20,510 INFO s
se, remoteHostTrusted = false
e
c
2
1
2
1
a
9
3
7
f
e
```

Your screenshot goes here

```
viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_01/2021_01_10.txt
2024-02-05 00:00:36,292 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$bin/hdfs dfs -cat /user/viethoang/lab02/_01/2021_01_01.txtt
2024-02-05 00:00:40,507 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_01/2021_01_07.txt
2024-02-05 00:01:08,857 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
aviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$bin/hdfs dfs -cat /user/viethoang/lab02/_01/2021_01_04.txt
2024-02-05 00:02:12,391 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$bin/hdfs dfs -cat /user/viethoang/lab02/_01/2021_02_10.txt
cat: `/user/viethoang/lab02/_01/2021_02_10.txt': No such file or directory
viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_02/2021_02_10.txt
2024-02-05 00:02:43,031 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
<viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_02/2021_02_01.txt
2024-02-05 00:02:55,614 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_02/2021_02_07.txt
2024-02-05 00:03:06,886 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_02/2021_02_04.txt
2024-02-05 00:03:12,868 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
yviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_03/2021_03_10.txt
2024-02-05 00:03:25,137 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
3viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_03/2021_03_01.txt
2024-02-05 00:03:31,496 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
yviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_03/2021_03_07.txt
2024-02-05 00:03:40,181 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_03/2021_03_04.txt
2024-02-05 00:03:45,621 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
eviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_04/2021_04_10.txt
2024-02-05 00:04:05,426 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_04/2021_04_01.txt
2024-02-05 00:04:12,690 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
oviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_04/2021_04_07.txt
2024-02-05 00:04:17,744 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
tviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_04/2021_04_04.txt
2024-02-05 00:04:25,286 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
```

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aviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_05/2021_05_10.txt
2024-02-05 00:04:39,920 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_05/2021_05_01.txt
2024-02-05 00:04:45,426 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
uviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_05/2021_05_07.txt
2024-02-05 00:04:52,502 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
hviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_05/2021_05_04.txt
2024-02-05 00:04:59,862 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
rviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_06/2021_06_10.txt
2024-02-05 00:05:26,623 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
iviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_06/2021_06_01.txt
2024-02-05 00:05:33,196 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_06/2021_06_07.txt
2024-02-05 00:05:40,739 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
oviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_06/2021_06_04.txt
2024-02-05 00:05:45,514 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
sviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_07/2021_07_10.txt
2024-02-05 00:05:56,785 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_07/2021_07_01.txt
2024-02-05 00:06:02,192 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_07/2021_07_07.txt
2024-02-05 00:06:08,328 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
uviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_07/2021_07_04.txt
2024-02-05 00:06:13,513 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
```

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_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_08/2021_08_10.txt
2024-02-05 00:06:59,489 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_08/2021_08_01.txt
2024-02-05 00:07:06,941 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
fviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_08/2021_08_07.txt
2024-02-05 00:07:11,829 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
sviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_08/2021_08_04.txt
2024-02-05 00:07:16,439 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_09/2021_09_10.txt
2024-02-05 00:07:27,334 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
lviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_09/2021_09_01.txt
2024-02-05 00:07:34,794 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
oviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_09/2021_09_07.txt
2024-02-05 00:07:39,165 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
aviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_09/2021_09_04.txt
2024-02-05 00:07:44,895 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
<viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_10/2021_10_10.txt
2024-02-05 00:07:59,189 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
oviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_10/2021_10_01.txt
2024-02-05 00:08:06,354 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
rviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_10/2021_10_07.txt
2024-02-05 00:08:12,439 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
nviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_10/2021_10_04.txt
2024-02-05 00:08:17,233 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
```

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3viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_11/2021_11_10.txt
2024-02-05 00:08:40,333 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
vviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_11/2021_11_01.txt
2024-02-05 00:08:45,145 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_11/2021_11_07.txt
2024-02-05 00:08:49,433 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
dviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_11/2021_11_04.txt
2024-02-05 00:08:54,216 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_12/2021_12_10.txt
2024-02-05 00:09:03,988 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
eviethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_12/2021_12_01.txt
2024-02-05 00:09:08,313 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_12/2021_12_07.txt
2024-02-05 00:09:13,896 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
_viethoang@viethoang-VirtualBox:~/Desktop/hadoop-3.2.1$ bin/hdfs dfs -cat /user/viethoang/lab02/_12/2021_12_04.txt
2024-02-05 00:09:18,917 INFO sasl.SaslDataTransferClient: SASL encryption trust check: localHostTrusted = false, remoteHostTrusted = false
```

Question 5:

Concatenate contents in the 4 screenshots of Question 4 to form the completed message. Finally, write it in the given table.

Your answer goes here
A day without laughter is a day wasted.

Submission Notice

- Export your answer file as pdf
- Rename the pdf following the format:

    lab02_<student number>_HoTen.pdf

    E.g: **lab02_123456_NguyenThanhAn.pdf**

    If you have not been assigned a student number yet, then use 123456 instead.
- Careless mistakes in filename, format, question order, etc. are not accepted (0 pts).