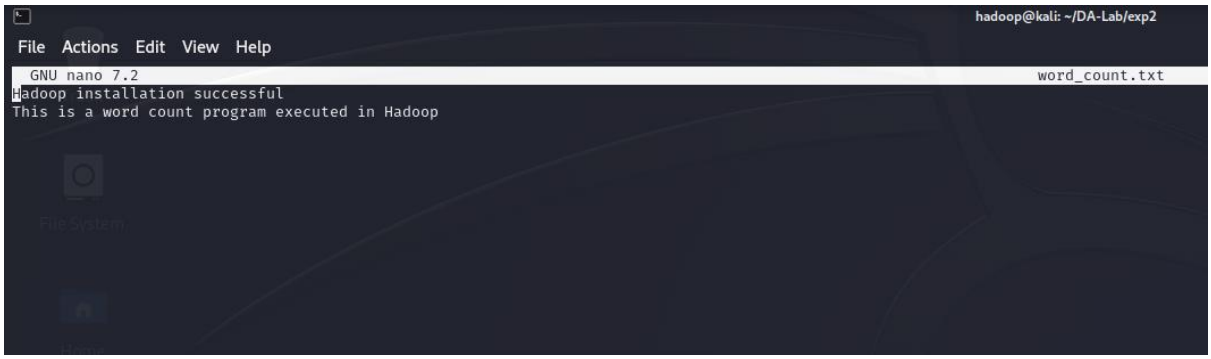
ROLL NUMBER: 210701096

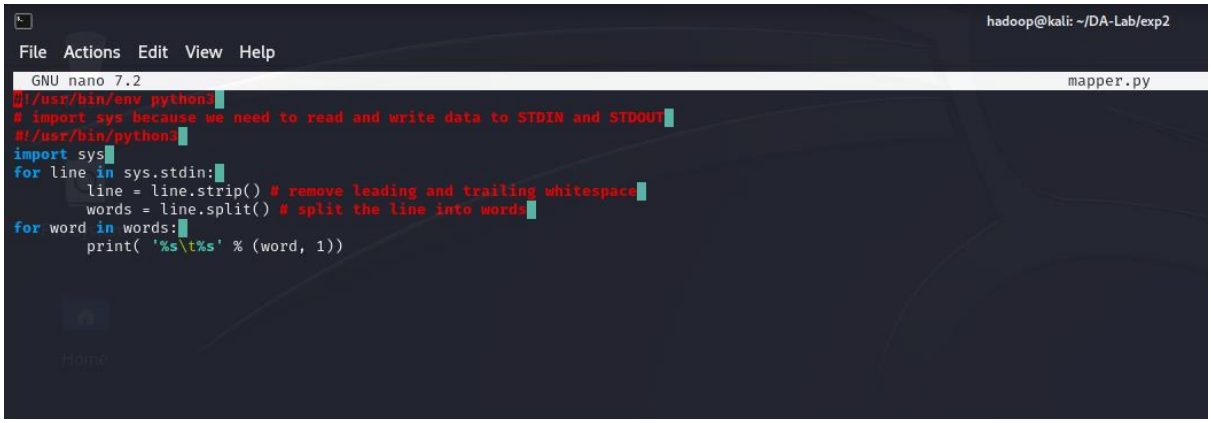
EXP NO: 2 RUN A BASIC WORD COUNT MAP REDUCE PROGRAM TO UNDERSTAND MAP REDUCE PARADIGM

$mkdir DA-Lab
$cd DA-Lab
$mkdir exp2
$cd exp2

$nano word_count.txt



$nano mapper.py



$nano reducer.py

$start-all.sh

```
hadoop@kali: ~
File  Actions  Edit  View  Help

┌──(hadoop㉿kali)-[~]
└─$ start-all.sh
WARNING: Attempting to start all Apache Hadoop daemons as hadoop in 10 seconds.
WARNING: This is not a recommended production deployment configuration.
WARNING: Use CTRL-C to abort.
Starting namenodes on [localhost]
Starting datanodes
Starting secondary namenodes [kali]
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSettings=on -Dswing.aatext=true
2024-09-11 04:59:16,429 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Starting resourcemanager
Starting nodemanagers
```

$ jps

```
┌──(hadoop㉿kali)-[~]
└─$ jps
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSettings=on -Dswing.aatext=true
14436 NodeManager
16772 Jps
13830 SecondaryNameNode
14311 ResourceManager
13597 DataNode
13471 NameNode

┌──(hadoop㉿kali)-[~]
└─$
```

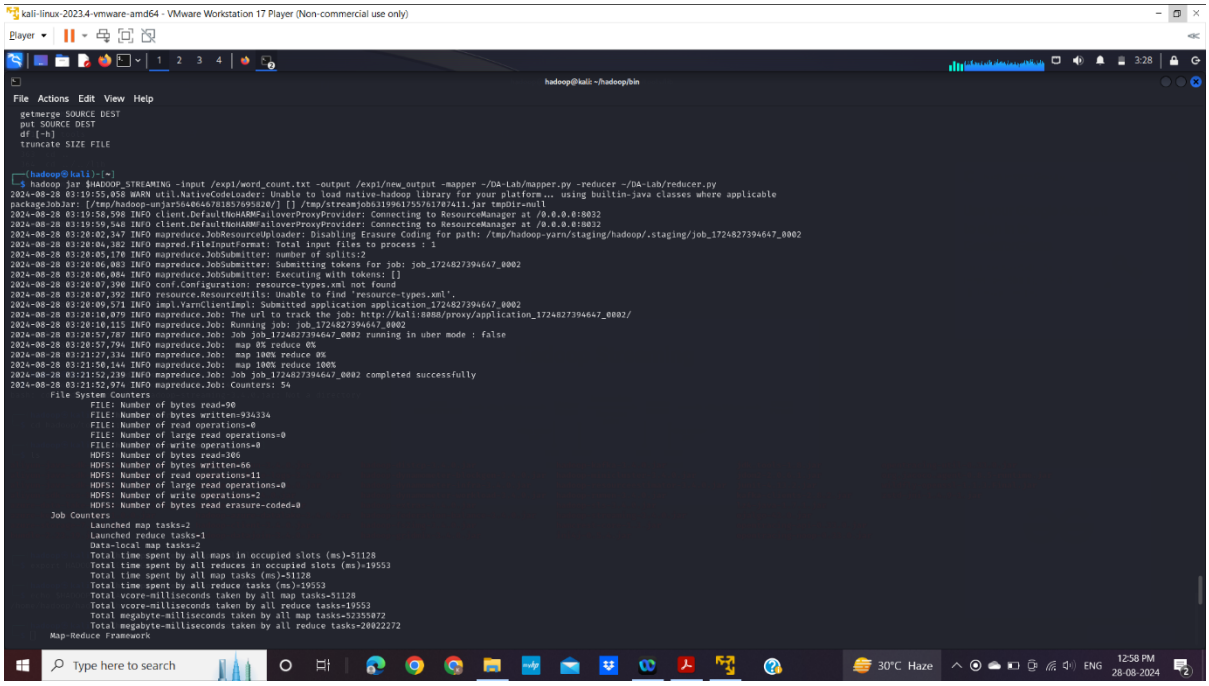
$hdfs dfs -mkdir /exp2

$hdfs dfs -copyFromLocal ~/DA-Lab/exp2/word_count.txt /exp2

```
┌──(hadoop㉿kali)-[~/hadoop/bin]
└─$ ./hdfs dfs -ls /exp2
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSettings=on -Dswing.aatext=true
2024-09-21 00:05:07,404 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Found 2 items
drwxr-xr-x   - hadoop supergroup          0 2024-09-13 01:05 /exp2/output
-rw-r--r--   1 hadoop supergroup         80 2024-09-13 01:02 /exp2/word_count.txt
```

$chmod 777 mapper.py reducer.py

$hadoop jar $HADOOP_STREAMING -input /exp2/word_count.txt -output /exp2/output -mapper ~/DA-Lab/exp2/mapper.py -reducer ~/DA-Lab/exp2/reducer.py



$hdfs dfs -cat /exp2/output/*