

1. Starting Hadoop Cluster

```
hadoop@DESKTOP-72U025C /$ cd /usr/local/hadoop/sbin
hadoop@DESKTOP-72U025C /usr/local/hadoop/sbin$ 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 [DESKTOP-72U025C]
Starting resourcemanager
Starting nodemanagers
hadoop@DESKTOP-72U025C /usr/local/hadoop/sbin$ jps
4128 SecondaryNameNode
3906 DataNode
4499 NodeManager
4342 ResourceManager
4859 Jps
3725 NameNode
```

2. Copying Binary file to Hadoop File System as a txt file

```
hadoop@DESKTOP-72U025C ~/hadfiles$ hadoop fs -copyFromLocal /home/hadoop/hadfiles/1901 /programs/avgtemp.txt
hadoop@DESKTOP-72U025C ~/hadfiles$ hadoop fs -ls /programs
Found 3 items
-rw-r--r-- 1 hadoop supergroup 888190 2020-12-14 15:04 /programs/avgtemp.txt
```

3. Running Average.jar

```
hadoop@DESKTOP-72U025C ~/hadfiles$ hadoop jar /home/hadoop/hadfiles/average.jar AverageDriver /programs/avgtemp.txt /programs/output2
```

4. Checking location of output file

```
hadoop@DESKTOP-72U025C ~/hadfiles$ hadoop fs -ls /programs
Found 4 items
-rw-r--r-- 1 hadoop supergroup 888190 2020-12-14 15:04 /programs/avgtemp.txt
drwxr-xr-x - hadoop supergroup 0 2020-12-08 23:36 /programs/output
drwxr-xr-x - hadoop supergroup 0 2020-12-14 15:07 /programs/output2
-rw-r--r-- 1 hadoop supergroup 92 2020-12-08 23:20 /programs/prog1.txt
```

5. Result

```
hadoop@DESKTOP-72U025C ~/hadfiles$ hadoop fs -cat /programs/output2/part-r-00000
1901 46
```

6. Stopping Hadoop

```
hadoop@DESKTOP-72U025C ~/hadfiles$ stop-all.sh
```