

Implement Wordcount program on Hadoop framework

```
hadoop@bmscscse-HP-Elite-Tower-600-G9-Desktop-PC:~$ 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]
localhost: namenode is running as process 12082. Stop it first and ensure /tmp/hadoop-hadoop-namenode.pid file is empty before retry.
Starting datanodes
localhost: datanode is running as process 12255. Stop it first and ensure /tmp/hadoop-hadoop-datanode.pid file is empty before retry.
Starting secondary namenodes [bmscscse-HP-Elite-Tower-600-G9-Desktop-PC]
bmscscse-HP-Elite-Tower-600-G9-Desktop-PC: secondarynamenode is running as process 12557. Stop it first and ensure /tmp/hadoop-hadoop-secondarynamenode.pid file is empty before retry.
Starting resource manager
resource manager is running as process 12845. Stop it first and ensure /tmp/hadoop-hadoop-resourcemanager.pid file is empty before retry.
Starting node managers
localhost: nodemanager is running as process 13014. Stop it first and ensure /tmp/hadoop-hadoop-nodemanager.pid file is empty before retry.
hadoop@bmscscse-HP-Elite-Tower-600-G9-Desktop-PC:~$ jps
12082 NameNode
13014 NodeManager
15100 org.eclipse.equinox.launcher_1.6.1000.v20250227-1734.jar
17036 Jps
12845 ResourceManager
12557 SecondaryNameNode
12255 DataNode
hadoop@bmscscse-HP-Elite-Tower-600-G9-Desktop-PC:~$ hdfs dfs -copyFromLocal /home/hadoop/sample.txt /bda_hadoop/input.txt
hadoop@bmscscse-HP-Elite-Tower-600-G9-Desktop-PC:~$ hadoop jar /home/hadoop/Desktop/hdpwordcount.jar WCDriver /bda_hadoop/input.txt /bda_hadoop/output
Exception in thread "main" java.lang.ClassNotFoundException: WCDriver
    at java.base/java.net.URLClassLoader.findClass(URLClassLoader.java:476)
    at java.base/java.lang.ClassLoader.loadClass(ClassLoader.java:594)
    at java.base/java.lang.ClassLoader.loadClass(ClassLoader.java:527)
    at java.base/java.lang.Class.forName0(Native Method)
    at java.base/java.lang.Class.forName(Class.java:398)
    at org.apache.hadoop.util.RunJar.run(RunJar.java:321)
    at org.apache.hadoop.util.RunJar.main(RunJar.java:241)
hadoop@bmscscse-HP-Elite-Tower-600-G9-Desktop-PC:~$ hadoop jar /home/hadoop/Desktop/hdpwordcount.jar hdpwordcount.WCDriver /bda_hadoop/input.txt /bda_hadoop/output
2025-05-26 14:40:01,404 INFO impl.MetricsConfig: Loaded properties from hadoop-metrics2.properties
2025-05-26 14:40:01,440 INFO impl.MetricsSystemImpl: Scheduled Metric snapshot period at 10 second(s).
2025-05-26 14:40:01,440 INFO impl.MetricsSystemImpl: JobTracker metrics system started
2025-05-26 14:40:01,446 WARN impl.MetricsSystemImpl: JobTracker metrics system already initialized!
2025-05-26 14:40:01,501 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool interface and execute your application with ToolRunner to remedy this.
2025-05-26 14:40:01,545 INFO mapred.FileInputFormat: Total input files to process : 1
2025-05-26 14:40:01,567 INFO mapreduce.JobSubmitter: number of splits:1
2025-05-26 14:40:01,624 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_local276129153_0001
2025-05-26 14:40:01,624 INFO mapreduce.JobSubmitter: Executing with tokens: []
2025-05-26 14:40:01,677 INFO mapreduce.Job: The url to track the job: http://localhost:8080/
2025-05-26 14:40:01,679 INFO mapred.LocalJobRunner: OutputCommitter set in config null
2025-05-26 14:40:01,679 INFO mapreduce.Job: Running job: job_local276129153_0001
2025-05-26 14:40:01,680 INFO mapred.LocalJobRunner: OutputCommitter is org.apache.hadoop.mapred.FileOutputCommitter
2025-05-26 14:40:01,682 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2
2025-05-26 14:40:01,682 INFO output.FileOutputCommitter: FileOutputCommitter skip cleanup _temporary folders under output directory:false, ignore
```

```
hadoop@bmscscse-HP-Elite-Tower-600-G9-Desktop-PC:~$ hdfs dfs -ls /bda_hadoop/output
Found 2 items
-rw-r--r-- 1 hadoop supergroup          0 2025-05-26 14:40 /bda_hadoop/output/_SUCCESS
-rw-r--r-- 1 hadoop supergroup        75 2025-05-26 14:40 /bda_hadoop/output/part-00000
hadoop@bmscscse-HP-Elite-Tower-600-G9-Desktop-PC:~$ hdfs dfs -cat /bda_hadoop/output/part-00000
are 1
brother 1
eof 1
family 1
hi 1
how 5
is 4
job 1
sister 1
you 1
your 4
hadoop@bmscscse-HP-Elite-Tower-600-G9-Desktop-PC:~$
```