Experiment No. 2.1

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Branch: **MCA - CCD**　　　　　　　　　**Section/Group:** **MCD-1/ Grp A**

Semester: **IV**　　　　　　　　　　　　**Date of Performance:** **15ᵗʰ Mar 24**

Subject Name: **Big Data Analytics**　　　**Subject Code:** **22CAP-782**

1. Aim/Overview of the practical:

Word Count Map Reduce program to understand Map Reduce Paradigm

2. Code for practical:

- Open terminal in Ubuntu and create a wordcount.java file.
- Add map reduce code in java file.
- Make a directory and put an input.txt file in it using

hdfs dfs -put /wordcount/input.txt /wordcount/Input

- Make class files using command

javac -classpath ${HADOOP_CLASSPATH} -d '/home/hadoop/wordCount/files'
'/home/hadoop/wordCount/WordCount.java'

- Make jar from class files

jar -cvf wordCount.jar -C files/ .

- Run Jar file to run map reduce program

hadoop jar /home/hadoop/wordCount/wordCount.jar WordCount /wordCount/Input /wordCount/Output

```
hadoop@ubuntu:~$ hadoop jar /home/hadoop/wordCount/wordCount.jar WordCount /wordCount/Input /wordCount/Output
2024-03-05 00:28:19,461 INFO client.DefaultNoHARMFailoverProxyProvider: Connecting to ResourceManager at /0.0.0.0:8032
2024-03-05 00:28:20,971 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool interface and execute your application
2024-03-05 00:28:21,022 INFO mapreduce.JobResourceUploader: Disabling Erasure Coding for path: /tmp/hadoop-yarn/staging/hadoop/.staging/job_1709574769693_0002
2024-03-05 00:28:21,582 INFO input.FileInputFormat: Total input files to process : 1
2024-03-05 00:28:21,806 INFO mapreduce.JobSubmitter: number of splits:1
2024-03-05 00:28:22,228 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1709574769693_0002
2024-03-05 00:28:22,228 INFO mapreduce.JobSubmitter: Executing with tokens: []
2024-03-05 00:28:22,575 INFO conf.Configuration: resource-types.xml not found
2024-03-05 00:28:22,575 INFO resource.ResourceUtils: Unable to find 'resource-types.xml'.
2024-03-05 00:28:22,708 INFO impl.YarnClientImpl: Submitted application application_1709574769693_0002
2024-03-05 00:28:22,792 INFO mapreduce.Job: The url to track the job: http://ubuntu:8088/proxy/application_1709574769693_0002/
2024-03-05 00:28:22,793 INFO mapreduce.Job: Running job: job_1709574769693_0002
2024-03-05 00:28:32,997 INFO mapreduce.Job: Job job_1709574769693_0002 running in uber mode : false
2024-03-05 00:28:33,001 INFO mapreduce.Job:  map 0% reduce 0%
2024-03-05 00:28:39,098 INFO mapreduce.Job:  map 100% reduce 0%
2024-03-05 00:28:46,177 INFO mapreduce.Job:  map 100% reduce 100%
2024-03-05 00:28:47,204 INFO mapreduce.Job: Job job_1709574769693_0002 completed successfully
2024-03-05 00:28:47,371 INFO mapreduce.Job: Counters: 54
        File System Counters
                FILE: Number of bytes read=484
                FILE: Number of bytes written=554313
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=416
                HDFS: Number of bytes written=330
                HDFS: Number of read operations=8
                HDFS: Number of large read operations=0
```

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- View output using command:

  hdfs dfs -cat /wordcount/Output/*

```
hadoop@ubuntu:~$ hdfs dfs -cat /wordCount/Output/*
Also,        1
Ensure       1
Flask        1
If           1
Lambda       1
Note:        1
a            1
app          2
application. 1
applications. 1
as           1
compatible   1
consider     1
deployment   3
designed     1
for          1
function.    1
is           2
long-running 1
might        1
need         1
options 1
or           2
other        1
processes,   1
refactor     1
requires     1
state        1
stateless    1
structure    1
that         1
the          2
to           1
with         1
you          1
your         3
zappa        1
```

*********************************** **THE END** ***********************************