LAB-07

Hadoop-TopN

```
File Edit Source Refactor Navigate Search Project Run Window Help
E S IP I = □ ② TopNijeve ① TopNiReducerjava ② TopNiMapperjava × ② TopNCombinerjava

1 package topniab;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              - 0 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PBBRK+ X 1 E
       > M. JRE System Library [JavaSD-1.0]

- M. Src

- M. topnlab
                                                                                                                                                                                                   public class TopMmapper extends Mmapper-Object, Text, Text, IntWritable> {
    private static final IntWritable ene = new IntWritable:11
    private Text word a new Towns.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  = toonlab
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G TopNMapper

of one: IntWritable
word: Text

    TopN.java
    TopNCombiner.java
    TopNMapper.java
    TopNMeducer.java

                                                                                                                                                                                                                              // Regex to clean out punctuation and special symbols private String tokens = "[ |$\text{String tokens} = "[ | \text{String tokens} = "[ \text
          ■ Referenced Libraries
                                                                                                                                                                                                                       @Overside
public void map(Object kmy, Text valum, Mapper-Object, Text, Text, IetWritable>.Context context)
throws ICEsception, InterruptedException {
      > settings
           a.classnath
                                                                                                                                                                                                                                          // Clean line and convert to lowercase
String cleanLine = value.toString().toLowerCase().replaceAll(this.tokens, " ");
                                                                                                                                                                                                                                          // Inkenize by whitespace
StringTokenizer itr = new StringTokenizer(cleanLine);
                                                                                                                                                                                                                                         // Emit each word with a count of 1
while (itr.hasMoreTekens()) {
    this.word.set(itr.nextTeken().trim());
    context.write(this.word, ame);
}
```

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hadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ start -all.sh
Command 'start' not found, did you mean:
  command 'stars' from snap stars (2.7jrc3)
command 'rstart' from deb x11-session-utils (7.7+4build2)
  command 'kstart' from deb kde-cli-tools (4:5.24.4-0ubuntu1)
  command 'startx' from deb xinit (1.4.1-Oubuntu4)
command 'stat' from deb coreutils (8.32-4.1ubuntu1.2) command 'tart' from deb tart (3.10-1build1) See 'snap info <snapname>' for additional versions.
hadoop@bmscecse-HP-Elite-Tower-800-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]
Starting datanodes
Starting secondary namenodes [bmscecse-HP-Elite-Tower-800-G9-Desktop-PC]
Starting resourcemanager
Starting nodemanagers
hadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hadoop fs -mkdir /mno
mkdir: Cannot create directory /mno. Name node is in safe mode.
hadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ ^C
hadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ ^C
hadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hdfs dfsadmin -safemode get
Safe mode is OFF
hadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hadoop fs -mkdir /mno
hadoop@bmscecse-HP-Elite-Tower-880-G9-Desktop-PC:~$ hadoop fs -copyFromLocal /home/hadoop/Desktop/sample.txt /mno/sample.tx
hadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hadoop jar /home/hadoop/Desktop/topn.jar TopN /mno/sample.txt /res
Exception in thread "main" java.lang.ClassNotFoundException: TopN
         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@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hadoop jar /home/hadoop/Desktop/topn.jar topnlab /mno/sample.txt /res Exception in thread "main" iava.lano.ClassNotFoundException: topnlab
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Exception in thread "main" java.lang.NoclassDefFoundError: topnlab/TopN (wrong name: TopN)
              at java.base/java.lang.ClassLoader.defineClass1(Native Method)
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at org.apache.hadoop.util.RunJar.main(RunJar.java:241)
hadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hadoop jar /home/hadoop/Desktop/topn.jar TopN /mno/sample.txt /res
Exception in thread "main" java.lang.NoClassDefFoundError: topnlab/TopN (wrong name: TopN)
          at java.base/java.lang.ClassLoader.defineClass1(Native Method)
          at java.base/java.lang.ClassLoader.defineClass(ClassLoader.java:1022) at java.base/java.security.SecureClassLoader.defineClass(SecureClassLoader.java:174)
          at java.base/java.net.URLClassLoader.defineClass(URLClassLoader.java:555)
          at java.base/java.net.URLClassLoader$1.run(URLClassLoader.java:458) at java.base/java.net.URLClassLoader$1.run(URLClassLoader.java:452)
          at java.base/java.security.AccessController.doPrivileged(Native Method)
          at java.base/java.net.URLClassLoader.findClass(URLClassLoader.java:451) at java.base/java.lang.ClassLoader.loadClass(ClassLoader.java:594)
           at java.base/java.lang.ClassLoader.loadClass(ClassLoader.java:527)
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hadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hadoop jar /home/hadoop/Desktop/topn.jar topnlab.TopN /mno/sample.txt /
2025-05-20 13:58:09,506 INFO impl.MetricsConfig: Loaded properties from hadoop-metrics2.properties
2025-05-20 13:58:09,545 INFO impl.MetricsSystemImpl: Scheduled Metric snapshot period at 10 second(s).
2025-05-20 13:58:09,545 INFO impl.MetricsSystemImpl: JobTracker metrics system started
2025-05-20 13:58:09,658 INFO input.FileInputFormat: Total input files to process : 1
                      WRONG_LENGTH=0
                      WRONG_MAP=0
WRONG_REDUCE=0
           File Input Format Counters
                      Bytes Read=75
           File Output Format Counters
                      Bytes Written=105
   adoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hadoop fs -cat /res/part-00000
  cat: `/res/part-00000': No such file or directory
          gbmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ hadoop fs -ls /res
  Found 2 items
```

nadoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~\$ hadoop fs -cat /res/part-r-00000

adoop@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~\$

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