For a given Text file, Create a Map Reduce program to sort the content in an alphabetic order listing only top 10 maximum occurrences of words.

```
hadoop@bmscecse-HP-Elite-Tower-600-G9-Desktop-PC:~$ jps
12082 NameNode
19238 Jps
13014 NodeManager
15100 org.eclipse.equinox.launcher_1.6.1000.v20250227-1734.jar
12845 ResourceManager
12557 SecondaryNameNode
12255 DataNode
hadoop@bmscecse-HP-Elite-Tower-600-G9-Desktop-PC:~$ hdfs dfs -copyFromLocal /home/hadoop/Desktop/TopN.txt /bda_
haoop/tinput.txt
copyFromLocal: `/bda_haoop/tinput.txt': No such file or directory: `hdfs://localhost:9000/bda_haoop/tinput.txt'
hadoop@bmscecse-HP-Elite-Tower-600-G9-Desktop-PC:~$ hdfs dfs -copyFromLocal /home/hadoop/Desktop/TopN.txt /bda_
hadoop/tinput.txt
hadoop@bmscecse-HP-Elite-Tower-600-G9-Desktop-PC:~$ hadoop jar /home/hadoop/Desktop/TopN.jar TopN.TNDriver /bda
_hadoop/tinput.txt /bda_hadoop/toutput
2025-05-26 14:59:03,334 INFO impl.MetricsConfig: Loaded properties from hadoop-metrics2.properties
2025-05-26 14:59:03,372 INFO impl.MetricsSystemImpl: Scheduled Metric snapshot period at 10 second(s).
2025-05-26 14:59:03,372 INFO impl.MetricsSystemImpl: JobTracker metrics system started
2025-05-26 14:59:03,426 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. I
mplement the Tool interface and execute your application with ToolRunner to remedy this.
2025-05-26 14:59:03,472 INFO input.FileInputFormat: Total input files to process : 1
2025-05-26 14:59:03,497 INFO mapreduce.JobSubmitter: number of splits:1
2025-05-26 14:59:03,554 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_local1824101299_0001
2025-05-26 14:59:03,554 INFO mapreduce.JobSubmitter: Executing with tokens: []
2025-05-26 14:59:03,609 INFO mapreduce.Job: The url to track the job: http://localhost:8080/
2025-05-26 14:59:03,610 INFO mapreduce.Job: Running job: job_local1824101299_0001
2025-05-26 14:59:03,610 INFO mapred.LocalJobRunner: OutputCommitter set in config null
2025-05-26 14:59:03,614 INFO output.PathOutputCommitterFactory: No output committer factory defined, defaulting
 to FileOutputCommitterFactory
2025-05-26 14:59:03,614 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2
2025-05-26 14:59:03,614 INFO output.FileOutputCommitter: FileOutputCommitter skip cleanup _temporary folders un
der output directory:false, ignore cleanup failures: false
2025-05-26 14:59:03,614 INFO mapred.LocalJobRunner: OutputCommitter is org.apache.hadoop.mapreduce.lib.output.F
ileOutputCommitter
2025-05-26 14:59:03,654 INFO mapred.LocalJobRunner: Waiting for map tasks
2025-05-26 14:59:03,655 INFO mapred.LocalJobRunner: Starting task: attempt_local1824101299_0001_m_000000_0
2025-05-26 14:59:03,664 INFO output.PathOutputCommitterFactory: No output committer factory defined, defaulting
 to FileOutputCommitterFactory
2025-05-26 14:59:03,664 INFO output.FileOutputCommitter: File Output Committer Algorithm version is 2
2025-05-26 14:59:03,664 INFO output.FileOutputCommitter: FileOutputCommitter skip cleanup _temporary folders un
der output directory:false, ignore cleanup failures: false
2025-05-26 14:59:03,670 INFO mapred.Task:  Using ResourceCalculatorProcessTree : [ ]
2025-05-26 14:59:03,672 INFO mapred.MapTask: Processing split: hdfs://localhost:9000/bda_hadoop/tinput.txt:0+95
2025-05-26 14:59:03,701 INFO mapred.MapTask: (EQUATOR) 0 kvi 26214396(104857584)
2025-05-26 14:59:03,701 INFO mapred.MapTask: mapreduce.task.io.sort.mb: 100
2025-05-26 14:59:03,701 INFO mapred.MapTask: soft limit at 83886080
2025-05-26 14:59:03,701 INFO mapred.MapTask: bufstart = 0; bufvoid = 104857600
2025-05-26 14:59:03,701 INFO mapred.MapTask: kvstart = 26214396; length = 6553600
2025-05-26 14:59:03,702 INFO mapred.MapTask: Map output collector class = org.apache.hadoop.mapred.MapTask$MapO
utputBuffer
2025-05-26 14:59:03,738 INFO mapred.LocalJobRunner:
2025-05-26 14:59:03,739 INFO mapred.MapTask: Starting flush of map output
```

```
        File System Counters
                FILE: Number of bytes read=10682
                FILE: Number of bytes written=1291808
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=190
                HDFS: Number of bytes written=40
                HDFS: Number of read operations=15
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=4
                HDFS: Number of bytes read erasure-coded=0
        Map-Reduce Framework
                Map input records=3
                Map output records=15
                Map output bytes=154
                Map output materialized bytes=190
                Input split bytes=108
                Combine input records=0
                Combine output records=0
                Reduce input groups=5
                Reduce shuffle bytes=190
                Reduce input records=15
                Reduce output records=5
                Spilled Records=30
                Shuffled Maps =1
                Failed Shuffles=0
                Merged Map outputs=1
                GC time elapsed (ms)=0
                Total committed heap usage (bytes)=1052770304
        Shuffle Errors
                BAD_ID=0
                CONNECTION=0
                IO_ERROR=0
                WRONG_LENGTH=0
                WRONG_MAP=0
                WRONG_REDUCE=0
        File Input Format Counters
                Bytes Read=95
        File Output Format Counters
                Bytes Written=40
hadoop@bmscecse-HP-Elite-Tower-600-G9-Desktop-PC:~$ hdfs dfs -ls /bda_hadoop/toutput
Found 2 items
-rw-r--r--   1 hadoop supergroup          0 2025-05-26 14:59 /bda_hadoop/toutput/_SUCCESS
-rw-r--r--   1 hadoop supergroup         40 2025-05-26 14:59 /bda_hadoop/toutput/part-r-00000
hadoop@bmscecse-HP-Elite-Tower-600-G9-Desktop-PC:~$ hdfs dfs -cat /bda_hadoop/toutput/part-r-00000
banana  5
apple   4
fruit   3
mango   2
kiwi    1
hadoop@bmscecse-HP-Elite-Tower-600-G9-Desktop-PC:~$ 
```