Write mapper and reducer program and then compile a jar of it and use hadoop command to run them.
Run the jar using following command

hadoop jar <jar_name> <class_name> <input_path_of_file> <output_path_HDFS_location>

Task 1:

Driver class(TVSalesInvalidDataJob.java)

```
package mapreduce.assignment.Task1;

import org.apache.hadoop.conf.Configuration;
import org.apache.hadoop.fs.Path;
import org.apache.hadoop.io.Text;
import org.apache.hadoop.mapreduce.Job;
import org.apache.hadoop.mapreduce.lib.input.FileInputFormat;
import org.apache.hadoop.mapreduce.lib.input.TextInputFormat;
import org.apache.hadoop.mapreduce.lib.output.FileOutputFormat;
import org.apache.hadoop.mapreduce.lib.output.TextOutputFormat;

public class TVSalesInvalidDataJob {
	@SuppressWarnings("deprecation")
	public static void main(String[] args) throws Exception {
		Configuration conf = new Configuration();
		Job job = new Job(conf, "Remove Invalid Data");
		job.setJarByClass(TVSalesInvalidDataJob.class);

		// Set number of reducer to 0
		job.setNumReduceTasks(0);

		// Set output key and Value classes for Mapper
		job.setMapOutputKeyClass(Text.class);
		job.setMapOutputValueClass(Text.class);

		// Set Mapper class
		job.setMapperClass(TVSalesInvalidDataMapper.class);


		// Set Input and Output format class
		job.setInputFormatClass(TextInputFormat.class);
		job.setOutputFormatClass(TextOutputFormat.class);

		// Provide input and output path
		FileInputFormat.addInputPath(job, new Path(args[1]));
		FileOutputFormat.setOutputPath(job, new Path(args[2]));

		// execute the job
		job.waitForCompletion(true);
	}
}
```

Mapper class(TVSalesInvalidDataMapper.java)

```
package mapreduce.assignment.Task1;

import java.io.IOException;
import java.util.StringTokenizer;
import org.apache.hadoop.io.LongWritable;
import org.apache.hadoop.io.Text;
import org.apache.hadoop.mapreduce.Mapper;

public class TVSalesInvalidDataMapper extends Mapper<LongWritable,
Text, Text, Text> {
	public void map(LongWritable key, Text value, Context context)
throws IOException, InterruptedException {

		Text word = new Text();
		String wholeLine = value.toString();
		int count = 0;
		StringTokenizer tokenWords = new
StringTokenizer(wholeLine, "|");

		// loop till tokens are available
		while(tokenWords.hasMoreTokens()) {
			word.set(tokenWords.nextToken());
			// finding if a string contains NA
			if(word.toString().equalsIgnoreCase("NA")) {
				count++;
			}
		}
		// excluding record that had invalid data
		if(count == 0) {
			Text newLine = new Text(wholeLine);
			context.write(newLine, null);
		}

	}

}
```

Output:

```
[acadgild@localhost hadoop_tutorial]$ hadoop jar TVSalesInvalidData.jar mapreduce.assignment.Task1.TVSalesInvalidDataJob /use
r/acadgild/hadoop/TVSales1/television.txt /user/acadgild/hadoop/TVSales1/out11
18/05/02 11:06:29 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
18/05/02 11:06:32 INFO client.RMProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032
18/05/02 11:06:37 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool in
terface and execute your application with ToolRunner to remedy this.
18/05/02 11:06:40 INFO input.FileInputFormat: Total input paths to process : 1
18/05/02 11:06:40 INFO mapreduce.JobSubmitter: number of splits:1
18/05/02 11:06:41 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1524394821802_0003
18/05/02 11:06:43 INFO impl.YarnClientImpl: Submitted application application_1524394821802_0003
18/05/02 11:06:43 INFO mapreduce.Job: The url to track the job: http://localhost:8088/proxy/application_1524394821802_0003/
18/05/02 11:06:43 INFO mapreduce.Job: Running job: job_1524394821802_0003
18/05/02 11:07:14 INFO mapreduce.Job: Job job_1524394821802_0003 running in uber mode : false
18/05/02 11:07:14 INFO mapreduce.Job:  map 0% reduce 0%
18/05/02 11:07:29 INFO mapreduce.Job:  map 100% reduce 0%
18/05/02 11:07:38 INFO mapreduce.Job: Job job_1524394821802_0003 completed successfully
18/05/02 11:07:38 INFO mapreduce.Job: Counters: 30
        File System Counters
                FILE: Number of bytes read=0
                FILE: Number of bytes written=107443
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=864
                HDFS: Number of bytes written=646
                HDFS: Number of read operations=5
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=2
        Job Counters
                Launched map tasks=1
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=13399
                Total time spent by all reduces in occupied slots (ms)=0
                Total time spent by all map tasks (ms)=13399
                Total vcore-milliseconds taken by all map tasks=13399
                Total megabyte-milliseconds taken by all map tasks=13720576
        Map-Reduce Framework
                Map input records=18
```

Hadoop 2.6_1_1 [Running] - Oracle VM VirtualBox

Applications Places System Wed May 2, 11:09 AM Acadgild

acadgild@localhost:~/Desktop/hadoop_tutorial

File Edit View Search Terminal Help

```
18/05/02 11:07:38 INFO mapreduce.Job: Job job_1524394821802_0003 completed successfully
18/05/02 11:07:38 INFO mapreduce.Job: Counters: 30
        File System Counters
                FILE: Number of bytes read=0
                FILE: Number of bytes written=107443
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=864
                HDFS: Number of bytes written=646
                HDFS: Number of read operations=5
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=2
        Job Counters
                Launched map tasks=1
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=13399
                Total time spent by all reduces in occupied slots (ms)=0
                Total time spent by all map tasks (ms)=13399
                Total vcore-milliseconds taken by all map tasks=13399
                Total megabyte-milliseconds taken by all map tasks=13720576
        Map-Reduce Framework
                Map input records=18
                Map output records=16
                Input split bytes=131
                Spilled Records=0
                Failed Shuffles=0
                Merged Map outputs=0
                GC time elapsed (ms)=94
                CPU time spent (ms)=800
                Physical memory (bytes) snapshot=88141824
                Virtual memory (bytes) snapshot=2056757248
                Total committed heap usage (bytes)=32571392
        File Input Format Counters
                Bytes Read=733
        File Output Format Counters
                Bytes Written=646
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost hadoop_tutorial]$
```

acadgild@local... | Student Dashb... | acadgild@local... | eclipse-worksp... | hadoop_tutorial | acadgild@local...

Hadoop 2.6_1_1 [Running] - Oracle VM VirtualBox

Applications Places System Wed May 2, 11:12 AM Acadgild

acadgild@localhost:~/Desktop/hadoop_tutorial

File Edit View Search Terminal Help

```
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost hadoop_tutorial]$ hadoop fs -cat /user/acadgild/hadoop/TVSales1/out11/part*
18/05/02 11:11:53 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Samsung|Optima|14|Madhya Pradesh|132401|14200
Onida|Lucid|18|Uttar Pradesh|232401|16200
Akai|Decent|16|Kerala|922401|12200
Lava|Attention|20|Assam|454601|24200
Zen|Super|14|Maharashtra|619082|9200
Samsung|Optima|14|Madhya Pradesh|132401|14200
Onida|Lucid|18|Uttar Pradesh|232401|16200
Onida|Decent|14|Uttar Pradesh|232401|16200
Lava|Attention|20|Assam|454601|24200
Zen|Super|14|Maharashtra|619082|9200
Samsung|Optima|14|Madhya Pradesh|132401|14200
Samsung|Decent|16|Kerala|922401|12200
Lava|Attention|20|Assam|454601|24200
Samsung|Super|14|Maharashtra|619082|9200
Samsung|Super|14|Maharashtra|619082|9200
Samsung|Super|14|Maharashtra|619082|9200
[acadgild@localhost hadoop_tutorial]$
```

Student Dashboard - Mozilla Firefox

acadgild@local... Student Dashb... acadgild@local... eclipse-worksp... hadoop_tutorial acadgild@local...

Task 2:

Driver class(TVSalesCountByCompanyJob.java)

```
package mapreduce.assignment.Task2;

import org.apache.hadoop.conf.Configuration;
import org.apache.hadoop.fs.Path;
import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.Text;
import org.apache.hadoop.mapreduce.Job;
import org.apache.hadoop.mapreduce.lib.input.FileInputFormat;
import org.apache.hadoop.mapreduce.lib.input.TextInputFormat;
import org.apache.hadoop.mapreduce.lib.output.FileOutputFormat;
import org.apache.hadoop.mapreduce.lib.output.TextOutputFormat;

public class TVSalesCountByCompanyJob {
	@SuppressWarnings("deprecation")
	public static void main(String[] args) throws Exception {
		Configuration conf = new Configuration();
		Job job = new Job(conf, "Total Unit sold");
		job.setJarByClass(TVSalesCountByCompanyJob.class);

		//set mapper output key and value
		job.setMapOutputKeyClass(Text.class);
		job.setMapOutputValueClass(IntWritable.class);

		//set reducer output key and value
		job.setOutputKeyClass(Text.class);
		job.setOutputValueClass(IntWritable.class);

		//set the mapper and reducer class
		job.setMapperClass(TVSalesCountByCompanyMapper.class);
		job.setReducerClass(TVSalesCountByCompanyReducer.class);

		job.setInputFormatClass(TextInputFormat.class);
		job.setOutputFormatClass(TextOutputFormat.class);

		//input file and the output path
		FileInputFormat.addInputPath(job, new Path(args[1]));
		FileOutputFormat.setOutputPath(job, new Path(args[2]));

		job.waitForCompletion(true);
	}
}
```

Mapper class(TVSalesCountByCompanyMapper.java)

```
package mapreduce.assignment.Task2;

import java.io.IOException;
import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.LongWritable;
import org.apache.hadoop.io.Text;
import org.apache.hadoop.mapreduce.Mapper;

public class TVSalesCountByCompanyMapper extends Mapper<LongWritable,
Text, Text, IntWritable>{
	public void map(LongWritable key, Text value, Context context)
throws IOException, InterruptedException {

		//split the string
		String[] lineArray = value.toString().split("\\|");
		//first element of array is the company name
		Text companyName = new Text(lineArray[0]);

		//add 1 for an occurrence of the company name
		context.write(companyName, new IntWritable(1));

	}

}
```

Reducer class(TVSalesCountByCompanyReducer.java)

```
package mapreduce.assignment.Task2;

import java.io.IOException;

import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.Text;
import org.apache.hadoop.mapreduce.Reducer;

public class TVSalesCountByCompanyReducer extends Reducer<Text,
IntWritable, Text, IntWritable> {
	public void reduce(Text key, Iterable<IntWritable> values,
Context context) throws IOException, InterruptedException {
		int count = 0;
		for(IntWritable value : values) {
			//increase the count
			count += value.get();
		}
		context.write(key, new IntWritable(count));
	}

}
```

Output:

Hadoop 2.6_1_1 [Running] - Oracle VM VirtualBox

Applications Places System Sun Apr 22, 5:45 PM Acadgild

acadgild@localhost:~/Desktop/hadoop_tutorial

File Edit View Search Terminal Help

```
[acadgild@localhost hadoop_tutorial]$ hadoop jar TotalUnitSoldByCompany.jar mapreduce.assignment.Task2.TVSalesCountByCompanyJ
ob /user/acadgild/hadoop/TVSales1/television.txt /user/acadgild/hadoop/TVSales1/out2
18/04/22 17:02:18 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
18/04/22 17:02:19 INFO client.RMProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032
18/04/22 17:02:20 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool in
terface and execute your application with ToolRunner to remedy this.
18/04/22 17:02:21 INFO input.FileInputFormat: Total input paths to process : 1
18/04/22 17:02:21 INFO mapreduce.JobSubmitter: number of splits:1
18/04/22 17:02:22 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1524394821802_0001
18/04/22 17:02:22 INFO impl.YarnClientImpl: Submitted application application_1524394821802_0001
18/04/22 17:02:22 INFO mapreduce.Job: The url to track the job: http://localhost:8088/proxy/application_1524394821802_0001/
18/04/22 17:02:22 INFO mapreduce.Job: Running job: job_1524394821802_0001
18/04/22 17:02:34 INFO mapreduce.Job: Job job_1524394821802_0001 running in uber mode : false
18/04/22 17:02:34 INFO mapreduce.Job:  map 0% reduce 0%
18/04/22 17:02:42 INFO mapreduce.Job:  map 100% reduce 0%
18/04/22 17:02:50 INFO mapreduce.Job:  map 100% reduce 100%
18/04/22 17:02:50 INFO mapreduce.Job: Job job_1524394821802_0001 completed successfully
18/04/22 17:02:50 INFO mapreduce.Job: Counters: 49
        File System Counters
                FILE: Number of bytes read=225
                FILE: Number of bytes written=216669
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=864
                HDFS: Number of bytes written=43
                HDFS: Number of read operations=6
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=2
        Job Counters
                Launched map tasks=1
                Launched reduce tasks=1
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=5699
                Total time spent by all reduces in occupied slots (ms)=4736
                Total time spent by all map tasks (ms)=5699
                Total time spent by all reduce tasks (ms)=4736
                Total vcore-milliseconds taken by all map tasks=5
```

eclipse-workspace - MapReducerExample/src/mapreduce/assignment/Task3/TVSalesCountByStateJob.java - Eclipse

acadgild@localhost:~/... [Namenode informatio... [acadgild@localhost:~... eclipse-workspace - M...

Hadoop 2.6_1_1 [Running] - Oracle VM VirtualBox

Applications Places System Sun Apr 22, 5:47 PM Acadgild

acadgild@localhost:~/Desktop/hadoop_tutorial

File Edit View Search Terminal Help

```
                Total time spent by all map tasks (ms)=5699
                Total time spent by all reduce tasks (ms)=4736
                Total vcore-milliseconds taken by all map tasks=5699
                Total vcore-milliseconds taken by all reduce tasks=4736
                Total megabyte-milliseconds taken by all map tasks=5835776
                Total megabyte-milliseconds taken by all reduce tasks=4849664
        Map-Reduce Framework
                Map input records=18
                Map output records=18
                Map output bytes=183
                Map output materialized bytes=225
                Input split bytes=131
                Combine input records=0
                Combine output records=0
                Reduce input groups=6
                Reduce shuffle bytes=225
                Reduce input records=18
                Reduce output records=6
                Spilled Records=36
                Shuffled Maps =1
                Failed Shuffles=0
                Merged Map outputs=1
                GC time elapsed (ms)=119
                CPU time spent (ms)=1090
                Physical memory (bytes) snapshot=287375360
                Virtual memory (bytes) snapshot=4118216704
                Total committed heap usage (bytes)=170004480
        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=733
        File Output Format Counters
                Bytes Written=43
You have new mail in /
```

Namenode information - Mozilla Firefox

acadgild@localhost:~/... [Namenode informatio... [acadgild@localhost:~... eclipse-workspace - M...

Hadoop 2.6_1_1 [Running] - Oracle VM VirtualBox

Applications Places System Wed May 2, 11:13 AM Acadgild

acadgild@localhost:~/Desktop/hadoop_tutorial

File Edit View Search Terminal Help

```
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost hadoop_tutorial]$ hadoop fs -cat /user/acadgild/hadoop/TVSales1/out2/part*
18/05/02 11:13:14 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Akai    1
Lava    3
NA      1
Onida   4
Samsung 7
Zen     2
[acadgild@localhost hadoop_tutorial]$
```

acadgild@local... Student Dashb... acadgild@local... eclipse-worksp... hadoop_tutorial acadgild@local...

Task 3:

Driver class(TVSalesCountByStateJob.java)

```
package mapreduce.assignment.Task3;

import org.apache.hadoop.conf.Configuration;
import org.apache.hadoop.fs.Path;
import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.Text;
import org.apache.hadoop.mapreduce.Job;
import org.apache.hadoop.mapreduce.lib.input.FileInputFormat;
import org.apache.hadoop.mapreduce.lib.input.TextInputFormat;
import org.apache.hadoop.mapreduce.lib.output.FileOutputFormat;
import org.apache.hadoop.mapreduce.lib.output.TextOutputFormat;

public class TVSalesCountByStateJob {
	@SuppressWarnings("deprecation")
	public static void main(String[] args) throws Exception {
		Configuration conf = new Configuration();
		Job job = new Job(conf, "Total Onida Unit sold ");
		job.setJarByClass(TVSalesCountByStateJob.class);

		job.setMapOutputKeyClass(Text.class);
		job.setMapOutputValueClass(IntWritable.class);

		job.setOutputKeyClass(Text.class);
		job.setOutputValueClass(IntWritable.class);
		job.setMapperClass(TVSalesCountByStateMapper.class);
		job.setReducerClass(TVSalesCountByStateReducer.class);

		job.setInputFormatClass(TextInputFormat.class);
		job.setOutputFormatClass(TextOutputFormat.class);

		FileInputFormat.addInputPath(job, new Path(args[1]));
		FileOutputFormat.setOutputPath(job, new Path(args[2]));

		job.waitForCompletion(true);
	}
}
```

Mapper class(TVSalesCountByStateMapper.java)

```
package mapreduce.assignment.Task3;

import java.io.IOException;

import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.LongWritable;
import org.apache.hadoop.io.Text;
import org.apache.hadoop.mapreduce.Mapper;

public class TVSalesCountByStateMapper extends Mapper<LongWritable,
Text, Text, IntWritable> {
	public void map(LongWritable key, Text value, Context context)
throws IOException, InterruptedException {

		String[] lineArray = value.toString().split("\\|");
		if(lineArray[0].equalsIgnoreCase("ONIDA")) {
			Text stateName = new Text(lineArray[3]);
			context.write(stateName, new IntWritable(1));
		}
		else {
			Text stateName = new Text(lineArray[3]);
			context.write(stateName, new IntWritable(0));
		}
	}
}
```

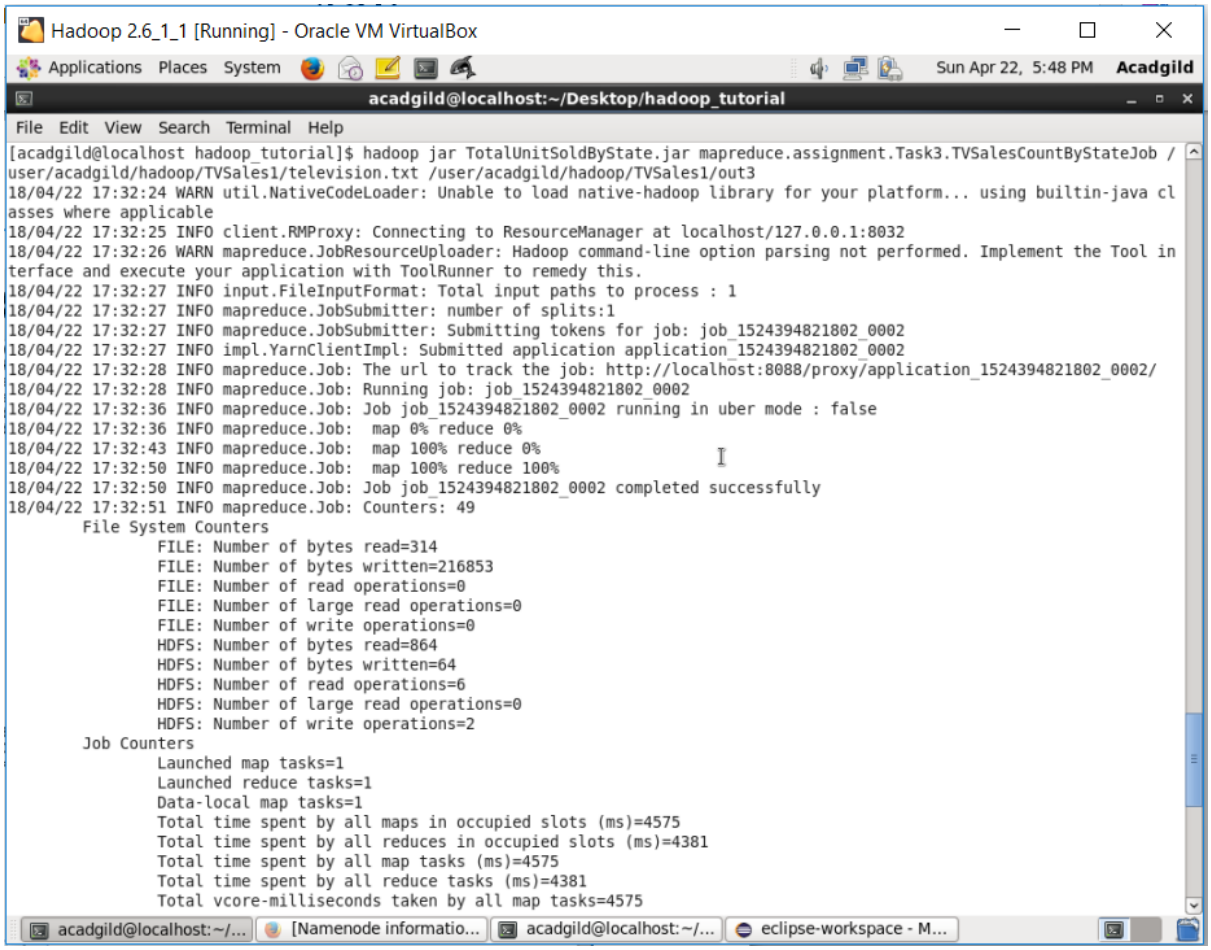
Reducer class(TVSalesCountByStateReducer.java)

```
package mapreduce.assignment.Task3;

import java.io.IOException;
import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.Text;
import org.apache.hadoop.mapreduce.Reducer;

public class TVSalesCountByStateReducer extends Reducer<Text,
IntWritable, Text, IntWritable> {
	public void reduce(Text key, Iterable<IntWritable> values,
Context context) throws IOException, InterruptedException {
		int count = 0;
		for(IntWritable value : values) {
			count += value.get();
		}
		context.write(key, new IntWritable(count));
	}
}
```

Output:



```
[acadgild@localhost hadoop_tutorial]$ hadoop jar TotalUnitSoldByState.jar mapreduce.assignment.Task3.TVSalesCountByStateJob /
user/acadgild/hadoop/TVSales1/television.txt /user/acadgild/hadoop/TVSales1/out3
18/04/22 17:32:24 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
18/04/22 17:32:25 INFO client.RMProxy: Connecting to ResourceManager at localhost/127.0.0.1:8032
18/04/22 17:32:26 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Implement the Tool in
terface and execute your application with ToolRunner to remedy this.
18/04/22 17:32:27 INFO input.FileInputFormat: Total input paths to process : 1
18/04/22 17:32:27 INFO mapreduce.JobSubmitter: number of splits:1
18/04/22 17:32:27 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1524394821802_0002
18/04/22 17:32:27 INFO impl.YarnClientImpl: Submitted application application_1524394821802_0002
18/04/22 17:32:28 INFO mapreduce.Job: The url to track the job: http://localhost:8088/proxy/application_1524394821802_0002/
18/04/22 17:32:28 INFO mapreduce.Job: Running job: job_1524394821802_0002
18/04/22 17:32:36 INFO mapreduce.Job: Job job_1524394821802_0002 running in uber mode : false
18/04/22 17:32:36 INFO mapreduce.Job:  map 0% reduce 0%
18/04/22 17:32:43 INFO mapreduce.Job:  map 100% reduce 0%
18/04/22 17:32:50 INFO mapreduce.Job:  map 100% reduce 100%
18/04/22 17:32:50 INFO mapreduce.Job: Job job_1524394821802_0002 completed successfully
18/04/22 17:32:51 INFO mapreduce.Job: Counters: 49
        File System Counters
                FILE: Number of bytes read=314
                FILE: Number of bytes written=216853
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=864
                HDFS: Number of bytes written=64
                HDFS: Number of read operations=6
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=2
        Job Counters
                Launched map tasks=1
                Launched reduce tasks=1
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=4575
                Total time spent by all reduces in occupied slots (ms)=4381
                Total time spent by all map tasks (ms)=4575
                Total time spent by all reduce tasks (ms)=4381
                Total vcore-milliseconds taken by all map tasks=4575
```

Hadoop 2.6_1_1 [Running] - Oracle VM VirtualBox

Applications Places System Sun Apr 22, 5:49 PM Acadgild

acadgild@localhost:~/Desktop/hadoop_tutorial

File Edit View Search Terminal Help

```
                Total time spent by all map tasks (ms)=4575
                Total time spent by all reduce tasks (ms)=4381
                Total vcore-milliseconds taken by all map tasks=4575
                Total vcore-milliseconds taken by all reduce tasks=4381
                Total megabyte-milliseconds taken by all map tasks=4684800
                Total megabyte-milliseconds taken by all reduce tasks=4486144
        Map-Reduce Framework
                Map input records=18
                Map output records=18
                Map output bytes=272
                Map output materialized bytes=314
                Input split bytes=131
                Combine input records=0
                Combine output records=0
                Reduce input groups=5
                Reduce shuffle bytes=314
                Reduce input records=18
                Reduce output records=5
                Spilled Records=36
                Shuffled Maps =1
                Failed Shuffles=0
                Merged Map outputs=1
                GC time elapsed (ms)=116
                CPU time spent (ms)=1040
                Physical memory (bytes) snapshot=287027200
                Virtual memory (bytes) snapshot=4117905408
                Total committed heap usage (bytes)=170004480
        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=733
        File Output Format Counters
                Bytes Written=64
You have new mail in /var/spool/mail/acadg:
```

acadgild@localhost:~/eclipse/java-oxygen/eclipse

acadgild@localhost:~/... [Namenode informatio... acadgild@localhost:~/... eclipse-workspace - M...

Hadoop 2.6_1_1 [Running] - Oracle VM VirtualBox

Applications Places System Wed May 2, 11:14 AM Acadgild

acadgild@localhost:~/Desktop/hadoop_tutorial

File Edit View Search Terminal Help

```
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost hadoop_tutorial]$ hadoop fs -cat /user/acadgild/hadoop/TVSales1/out3/part*
18/05/02 11:14:31 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Assam   0
Kerala  1
Madhya Pradesh  0
Maharashtra     0
Uttar Pradesh   3
[acadgild@localhost hadoop_tutorial]$
```

acadgild@local... Student Dashb... acadgild@local... eclipse-worksp... hadoop_tutorial acadgild@local...