

SalesCountryDriver.java

```
package SalesCountry;
```

```
import org.apache.hadoop.fs.Path;
import org.apache.hadoop.io.*;
import org.apache.hadoop.mapred.*;
```

```
public class SalesCountryDriver {
    public static void main(String[] args) {
        JobClient my_client = new JobClient();
        // Create a configuration object for the job
        JobConf job_conf = new JobConf(SalesCountryDriver.class);

        // Set a name of the Job
        job_conf.setJobName("SalePerCountry");

        // Specify data type of output key and value
        job_conf.setOutputKeyClass(Text.class);
        job_conf.setOutputValueClass(IntWritable.class);

        // Specify names of Mapper and Reducer Class
        job_conf.setMapperClass(SalesCountry.SalesMapper.class);
        job_conf.setReducerClass(SalesCountry.SalesCountryReducer.class);

        // Specify formats of the data type of Input and output
        job_conf.setInputFormat(TextInputFormat.class);
        job_conf.setOutputFormat(TextOutputFormat.class);

        // Set input and output directories using command line arguments,
        //arg[0] = name of input directory on HDFS, and arg[1] = name of output directory to be created to store the
        output file.

        FileInputFormat.setInputPaths(job_conf, new Path(args[0]));
        FileOutputFormat.setOutputPath(job_conf, new Path(args[1]));

        my_client.setConf(job_conf);
        try {
            // Run the job
            JobClient.runJob(job_conf);
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

SalesMapper.java

```
package SalesCountry;
```

```
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.mapred.*;
```

```
public class SalesMapper extends MapReduceBase implements Mapper<LongWritable, Text, Text, IntWritable> {
    private final static IntWritable one = new IntWritable(1);

    public void map(LongWritable key, Text value, OutputCollector<Text, IntWritable> output, Reporter reporter) throws
    IOException {

        String valueString = value.toString();
        String[] SingleCountryData = valueString.split("-");
        output.collect(new Text(SingleCountryData[0]), one);
    }
}
```

SalesCountryReducer.java

```
package SalesCountry;

import java.io.IOException;
import java.util.*;

import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.Text;
import org.apache.hadoop.mapred.*;

public class SalesCountryReducer extends MapReduceBase implements Reducer<Text, IntWritable, Text, IntWritable> {

    public void reduce(Text t_key, Iterator<IntWritable> values, OutputCollector<Text,IntWritable> output, Reporter reporter)
    throws IOException {
        Text key = t_key;
        int frequencyForCountry = 0;
        while (values.hasNext()) {
            // replace type of value with the actual type of our value
            IntWritable value = (IntWritable) values.next();
            frequencyForCountry += value.get();
        }
        output.collect(key, new IntWritable(frequencyForCountry));
    }
}
```


File Output Format Counters

Bytes Written=3838

hduser@stud-OptiPlex-3060:~/analyzeLogs\$ \$HADOOP_HOME/bin/hdfs dfs -cat /output777/part-00000
20/01/02 12:29:06 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

10.1.1.236	7
10.1.181.142	14
10.1.232.31	5
10.10.55.142	14
10.102.101.66	1
10.103.184.104	1
10.103.190.81	53
10.103.63.29	1
10.104.73.51	1
10.105.160.183	1
10.108.91.151	1
10.109.21.76	1
10.11.131.40	1
10.111.71.20	8
10.112.227.184	6
10.114.74.30	1
10.115.118.78	1
10.117.224.230	1
10.117.76.22	12
10.118.19.97	1
10.118.250.30	7
10.119.117.132	23
10.119.33.245	1
10.119.74.120	1
10.12.113.198	2
10.12.219.30	1
10.120.165.113	1
10.120.207.127	4
10.123.124.47	1
10.123.35.235	1
10.124.148.99	1
10.124.155.234	1
10.126.161.13	7
10.127.162.239	1
10.128.11.75	10
10.13.42.232	1
10.130.195.163	8
10.130.70.80	1

