File: 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[7]), one);
}
}
File: SalesCountryReducer.java
package SalesCountry;
```

```
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: 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);
```

```
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 <math>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();
}
}
}
```

Output:





