INPUT:

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] = \text{name of input directory on HDFS}, and \arg[1] = \text{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

```
SalesCountryDriver[1].javapackage 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);
       }
}
```

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));
}
```

OUTPUT: Argentina 1 38 Australia Austria7 Bahrain 1 8 Belgium 1 Bermuda Brazil 5 Bulgaria 1 CO Canada76 Cayman Isls 1 China 1 Costa Rica 1 Country 1 Czech Republic 3 Denmark 15 Dominican Republic 1 Finland France 27 Germany 25 Greece 1 Guatemala 1 1 Hong Kong 3 Hungary Iceland 1 India 2 Ireland 49 Israel 1 Italy 15 Japan 2 Jersey 1 Kuwait1 Latvia 1 Luxembourg 1 Malaysia 1 Malta 2 Mauritius 1 Moldova 1 2 Monaco Netherlands 22 New Zealand 6 Norway 16 Philippines 2 Poland 2 1 Romania Russia 1 South Africa 5 South Korea 1

Spain 12

Sweden 13
Switzerland 36
Thailand 2
The Bahamas 2
Turkey 6
Ukraine 1
United Arab Emirates 6
United Kingdom 100
United States 462



