

Code-

Java Code to process logfile

Mapper Class:

```
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);
    }
}
```

Reducer Class:

```
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));
    }
}
```

Driver Class:

```
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();
        }
    }
}
```

Input File

Pune
Mumbai
Nashik
Pune
Nashik

Mumbai 1

Nashik 2

Pune 2

Kolapur 1