

Row Count Program

```
import java.io.IOException;

import java.util.*;

import org.apache.hadoop.fs.Path;

import org.apache.hadoop.io.*;

import org.apache.hadoop.mapred.*;

public class LineCount
{
    public static class Map extends MapReduceBase implements
        Mapper < LongWritable, Text, Text, IntWritable > //MAPPER CLASS
    {
        private final static IntWritable one = new IntWritable (1);
        private Text word = new Text ("Total Number of Rows : "); //word is a variable which will be
        used for printing the output

        public void map (LongWritable key, Text value,
            OutputCollector < Text, IntWritable > output,
            Reporter reporter) throws IOException
        {
            {
                output.collect (word, one); //one is the variable which consists ROWCOUNT
            }
        }
    }

    public static class Reduce extends MapReduceBase implements
        Reducer < Text, IntWritable, Text, IntWritable > //REDUCER CLASS
    {
        public void reduce (Text key, Iterator < IntWritable > values,
            OutputCollector < Text, IntWritable > output,
            Reporter reporter) throws IOException
        {
            {
                int sum = 0;
                while (values.hasNext ()) //Parsing file
                {
                    sum += values.next ().get (); //Counting Number of Rows
                }
                output.collect (key, new IntWritable (sum));
            }
        }
    }

    public static void main (String[] args) throws Exception
    {
        JobConf conf = new JobConf (LineCount.class);
        conf.setJobName ("LineCount"); //LineCount is the CLASS name
        conf.setNumReduceTasks (5);
        conf.setOutputKeyClass (Text.class);
        conf.setOutputValueClass (IntWritable.class);
        conf.setMapperClass (Map.class);
        conf.setCombinerClass (Reduce.class);
        conf.setReducerClass (Reduce.class);
        conf.setInputFormat (TextInputFormat.class);
        conf.setOutputFormat (TextOutputFormat.class);
        FileInputFormat.setInputPaths (conf, new Path (args[0])); //Takes argument[0] as input file in
        command prompt
    }
}
```

```
FileOutputFormat.setOutputPath (conf, new Path (args[1])); //Takes argument[1] as output file  
in command prompt
```

```
    JobClient.runJob (conf);  
}  
}
```