package hadoop;

import java.io.IOException;

import java.util.\*;

import org.apache.hadoop.fs.Path;

import org.apache.hadoop.conf.\*;

import org.apache.hadoop.io.\*;

import org.apache.hadoop.mapreduce.\*;

import org.apache.hadoop.mapreduce.lib.input.FileInputFormat;

import org.apache.hadoop.mapreduce.lib.input.TextInputFormat;

import org.apache.hadoop.mapreduce.lib.output.FileOutputFormat;

import org.apache.hadoop.mapreduce.lib.output.TextOutputFormat;

public class Wordcount

{

public static class hmap extends Mapper<LongWritable, Text, Text, IntWritable>

{

private final static IntWritable one = new IntWritable(1);

private Text word = new Text();

public void map(LongWritable key, Text value, Context context)

throws IOException,InterruptedException

{

String line = value.toString();

String spl[]=line.split(" ");

for(String s : spl)

{

word.set(s);

context.write(word, one);

}

}

}

public static class hreduce extends Reducer<Text, IntWritable, Text, IntWritable>

{

public void reduce(Text key, Iterable<IntWritable> values, Context context) throws IOException, InterruptedException

{

int sum = 0;

for(IntWritable val: values)

{

sum += val.get();

}

context.write(key, new IntWritable(sum));

}

}

public static void main(String[] args) throws Exception

{

Configuration conf = new Configuration ();

//conf.set("Mapred.job.tracker", "hdfs://hadoopmaster:54311");

//conf.set("fs.default.name", "hdfs://hadoopmaster:54310");

Job job = new Job(conf,"Wordcount");

job.setJarByClass(Wordcount.class);

job.setOutputKeyClass(Text.class);

job.setOutputValueClass(IntWritable.class);

job.setMapperClass(hmap.class);

job.setReducerClass(hreduce.class);

job.setInputFormatClass(TextInputFormat.class);

job.setOutputFormatClass(TextOutputFormat.class);

FileInputFormat.addInputPath(job, new Path(args[0]));

FileOutputFormat.setOutputPath(job, new Path(args[1]));

job.waitForCompletion(true);

}

}