package F22;

import java.io.IOException;

import java.util.StringTokenizer;

import org.apache.hadoop.conf.Configuration;

import org.apache.hadoop.fs.Path;

import org.apache.hadoop.io.Text;

import org.apache.hadoop.io.IntWritable;

import org.apache.hadoop.io.LongWritable;

import org.apache.hadoop.mapreduce.Mapper;

import org.apache.hadoop.mapreduce.Reducer;

import org.apache.hadoop.mapreduce.Job;

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

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

import org.apache.hadoop.util.GenericOptionsParser;

public class F222

{

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

{

public void map(LongWritable key, Text value, Context con) throws IOException, InterruptedException

{

String line = value.toString();

String[] line1=line.split(",");

String gender=line1[3];

Text outputKey = new Text(gender);

int salary=Integer.parseInt(line1[2]);

IntWritable outputValue = new IntWritable(salary);

con.write(outputKey, outputValue);

} // end of map()

} //end of Mapper Class

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

{

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

{

int sum = 0;

for(IntWritable value : values)

{

sum += value.get();

}

con.write(word, new IntWritable(sum));

} // end of reduce()

} // end of Reducer class

// job definition

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

{

Configuration c = new Configuration();

String[] files = new GenericOptionsParser(c, args).getRemainingArgs();

Path input = new Path(files[0]);

Path output = new Path(files[1]);

Job j = new Job(c, "GenderWiseTotalSalary");

j.setJarByClass(F222.class);

j.setMapperClass(MapForWordCount.class);

j.setReducerClass(ReduceForWordCount.class);

j.setOutputKeyClass(Text.class);

j.setOutputValueClass(IntWritable.class);

FileInputFormat.addInputPath(j, input);

FileOutputFormat.setOutputPath(j, output);

System.exit(j.waitForCompletion(true) ? 0:1);

} // end of main()

} //end of main class

Inputf2

1,a,1000,F

2,b,2000,M

3,c,3000,F

4,d,4000,M

Outputf2

F 4000

M 6000