**Program 3 : wordcount (input is of text type)**

package wordcount;

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.IntWritable;

import org.apache.hadoop.io.Text;

import org.apache.hadoop.mapreduce.Job;

import org.apache.hadoop.mapreduce.Mapper;

import org.apache.hadoop.mapreduce.Reducer;

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

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

public class wordcount {

public static class TokenizerMapper

extends Mapper<Object, Text, Text, IntWritable>{

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

private Text word = new Text();

public void map(Object key, Text value, Context context

) throws IOException, InterruptedException {

StringTokenizer itr = new StringTokenizer(value.toString());

while (itr.hasMoreTokens()) {

word.set(itr.nextToken());

context.write(word, one);

}

}

}

public static class IntSumReducer

extends Reducer<Text,IntWritable,Text,IntWritable> {

private IntWritable result = new IntWritable();

public void reduce(Text key, Iterable<IntWritable> values,

Context context

) throws IOException, InterruptedException {

int sum = 0;

for (IntWritable val : values) {

sum += val.get();

}

result.set(sum);

context.write(key, result);

}

}

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

Configuration conf = new Configuration();

Job job = Job.getInstance(conf, "word count");

job.setJarByClass(wordcount.class);

job.setMapperClass(TokenizerMapper.class);

job.setCombinerClass(IntSumReducer.class);

job.setReducerClass(IntSumReducer.class);

job.setOutputKeyClass(Text.class);

job.setOutputValueClass(IntWritable.class);

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

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

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

}

}

**Program 4 ( Input is of CSV type)**

package transactioncount;

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 transactioncount{

//MAPPER CODE

public static class Map extends MapReduceBase implements 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, OutputCollector<Text, IntWritable> output, Reporter reporter) throws IOException {

String myString = value.toString();

String[] userCount = myString.split(",");

output.collect(new Text(userCount[3]), one);

}

}

//REDUCER CODE

public static class Reduce extends MapReduceBase implements Reducer<Text, IntWritable, Text, IntWritable> {

public void reduce(Text key, Iterator<IntWritable> values, OutputCollector<Text, IntWritable> output, Reporter reporter) throws IOException { //{little: {1,1}}

int finaluserCount = 0 ;

Text mykey = key ;

while(values.hasNext()) {

IntWritable value = values.next();

finaluserCount += value.get();

}

output.collect(mykey, new IntWritable(finaluserCount));

}

}

//DRIVER CODE

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

JobConf conf = new JobConf(transactioncount.class);

conf.setJobName("transactioncount");

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); // hadoop jar jarname classpath inputfolder outputfolder

FileInputFormat.setInputPaths(conf, new Path(args[0]));

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

JobClient.runJob(conf);

}

}