Q) Hot and Cold days Prob

package com.mr;

import java.io.IOException;

import java.util.Iterator;

import org.apache.hadoop.fs.Path;

import org.apache.hadoop.io.LongWritable;

import org.apache.hadoop.io.Text;

import org.apache.hadoop.mapred.FileInputFormat;

import org.apache.hadoop.mapred.FileOutputFormat;

import org.apache.hadoop.mapred.JobClient;

import org.apache.hadoop.mapred.JobConf;

import org.apache.hadoop.mapred.MapReduceBase;

import org.apache.hadoop.mapred.Mapper;

import org.apache.hadoop.mapred.OutputCollector;

import org.apache.hadoop.mapred.Reducer;

import org.apache.hadoop.mapred.Reporter;

import org.apache.hadoop.mapred.TextInputFormat;

import org.apache.hadoop.mapred.TextOutputFormat;

public class WeatherData {

public static class MaxTemperatureMapper extends MapReduceBase implements Mapper<LongWritable, Text, Text, Text> {

public void map(LongWritable arg0, Text Value,OutputCollector<Text, Text> output, Reporter arg3)

throws IOException

{

String line = Value.toString();

String date = line.substring(6, 14);

float temp\_Max = Float.parseFloat(line.substring(39, 45).trim());

float temp\_Min = Float.parseFloat(line.substring(47, 53).trim());

if (temp\_Max > 40.0) {

// Hot day

output.collect(new Text("Hot Day " + date),

new Text(String.valueOf(temp\_Max)));

}

if (temp\_Min < 10) {

// Cold day

output.collect(new Text("Cold Day " + date),

new Text(String.valueOf(temp\_Min)));

}

}

}

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

public void reduce(Text Key, Iterator<Text> Values,OutputCollector<Text, Text> output, Reporter arg3) throws IOException {

String temperature = Values.next().toString();

output.collect(Key, new Text(temperature));

}

}

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

JobConf conf = new JobConf(WeatherData.class);

conf.setJobName("temp");

conf.setMapOutputKeyClass(Text.class);

conf.setMapOutputValueClass(Text.class);

conf.setMapperClass(MaxTemperatureMapper.class);

conf.setReducerClass(MaxTemperatureReducer.class);

conf.setInputFormat(TextInputFormat.class);

conf.setOutputFormat(TextOutputFormat.class);

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

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

JobClient.runJob(conf);

}

}