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| |  | | --- | | import java.io.IOException; | |  |  | |  | import org.apache.hadoop.conf.Configuration; | |  | import org.apache.hadoop.fs.Path; | |  | import org.apache.hadoop.io.Text; | |  | import org.apache.hadoop.io.LongWritable; | |  | 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.MultipleInputs; | |  | import org.apache.hadoop.mapreduce.lib.input.TextInputFormat; | |  | import org.apache.hadoop.mapreduce.lib.output.FileOutputFormat; | |  |  | |  | public class ReduceJoin { | |  |  | |  | public static class CustsMapper extends | |  | Mapper<LongWritable, Text, Text, Text> { | |  | public void map(LongWritable key, Text value, Context context) | |  | throws IOException, InterruptedException { | |  | String record = value.toString(); | |  | String[] parts = record.split(","); | |  | context.write(new Text(parts[0]), new Text("custs\t" + parts[1])); | |  | } | |  | } | |  |  | |  | public static class TxnsMapper extends | |  | Mapper<LongWritable, Text, Text, Text> { | |  | public void map(LongWritable key, Text value, Context context) | |  | throws IOException, InterruptedException { | |  | String record = value.toString(); | |  | String[] parts = record.split(","); | |  | context.write(new Text(parts[2]), new Text("txns\t" + parts[3])); | |  | } | |  | } | |  |  | |  | public static class ReduceJoinReducer extends | |  | Reducer<Text, Text, Text, Text> { | |  | public void reduce(Text key, Iterable<Text> values, Context context) | |  | throws IOException, InterruptedException { | |  | String name = ""; | |  | double total = 0.0; | |  | int count = 0; | |  | for (Text t : values) { | |  | String parts[] = t.toString().split("\t"); | |  | if (parts[0].equals("txns")) { | |  | count++; | |  | total += Float.parseFloat(parts[1]); | |  | } else if (parts[0].equals("custs")) { | |  | name = parts[1]; | |  | } | |  | } | |  | String str = String.format("%d\t%f", count, total); | |  | context.write(new Text(name), new Text(str)); | |  | } | |  | } | |  |  | |  | public static void main(String[] args) throws Exception { | |  |  | |  | Configuration conf = new Configuration(); | |  | Job job = Job.getInstance(conf); | |  | job.setJarByClass(ReduceJoin.class); | |  | job.setJobName("Reduce Side Join"); | |  | job.setReducerClass(ReduceJoinReducer.class); | |  | job.setOutputKeyClass(Text.class); | |  | job.setOutputValueClass(Text.class); | |  |  | |  | MultipleInputs.addInputPath(job, new Path(args[0]),TextInputFormat.class, CustsMapper.class); | |  | MultipleInputs.addInputPath(job, new Path(args[1]),TextInputFormat.class, TxnsMapper.class); | |  |  | |  | Path outputPath = new Path(args[2]); | |  | FileOutputFormat.setOutputPath(job, outputPath); | |  | //outputPath.getFileSystem(conf).delete(outputPath); | |  |  | |  | System.exit(job.waitForCompletion(true) ? 0 : 1); | |  | } |   } | |
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