

Difference: Wordcount and Logcount

My_Mapper:

```
My_Mapper.java x My_Reducer.java Driver.java
1 package wordcountss;
2
3 import org.apache.hadoop.mapreduce.Mapper;
4 import org.apache.hadoop.io.IntWritable;
5 import org.apache.hadoop.io.Text;
6
7 import java.io.IOException;
8 import java.util.StringTokenizer;
9
10 public class My_Mapper extends Mapper<Object,Text, Text, IntWritable> {
11     private final static IntWritable one = new IntWritable(1);
12     private Text word = new Text();
13
14     public void map(Object key, Text value, Context context) throws IOException, InterruptedException {
15         StringTokenizer tokenizer = new StringTokenizer(value.toString());
16         while(tokenizer.hasMoreTokens())
17         {
18             word.set(tokenizer.nextToken());
19             context.write(word,one);
20         }
21     }
22 }
23 }
```

```
My_Mapper.java x My_Reducer.java Driver.java
1 package log;
2
3 import org.apache.hadoop.mapreduce.Mapper;
4 import org.apache.hadoop.io.IntWritable;
5 import org.apache.hadoop.io.Text;
6 import java.io.IOException;
7 import java.util.StringTokenizer;
8
9 public class My_Mapper extends Mapper<Object,Text, Text, IntWritable> {
10     private final static IntWritable one = new IntWritable(1);
11     private Text ipAddress = new Text();
12
13     public void map(Object key, Text value, Context context) throws IOException, InterruptedException {
14         StringTokenizer itr = new StringTokenizer(value.toString(), " ");
15
16         ipAddress.set(itr.nextToken());
17         context.write(ipAddress,one);
18     }
19 }
20 }
```

My_Reducer:

```
My_Mapper.java  My_Reducer.java x  Driver.java
1 package wordcountss;
2
3 import org.apache.hadoop.mapreduce.Reducer;
4 import org.apache.hadoop.io.IntWritable;
5 import org.apache.hadoop.io.Text;
6
7 import java.io.IOException;
8
9 public class My_Reducer extends Reducer<Text, IntWritable, Text, IntWritable> {
10
11     public void reduce(Text word, Iterable<IntWritable> values, Context context) throws IOException, InterruptedException {
12         int sum = 0;
13         for (IntWritable value : values) {
14             sum += value.get();
15         }
16         context.write(word, new IntWritable(sum));
17     }
18 }
19 }
```

```
package log;
import org.apache.hadoop.mapreduce.Reducer;
import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.Text;
import java.io.IOException;

public class My_Reducer extends Reducer<Text, IntWritable, Text, IntWritable> {
    private Text maxWord = new Text();
    private int maxCount = 0;

    public void reduce(Text word, Iterable<IntWritable> values, Context context) throws IOException, InterruptedException {
        int sum = 0;
        for (IntWritable value : values) {
            sum += value.get();
        }

        if (sum > maxCount) {
            maxCount = sum;
            maxWord.set(word);
        }
    }

    protected void cleanup(Context context) throws IOException, InterruptedException {
        context.write(maxWord, new IntWritable(maxCount));
    }
}
```

Driver:

```
package wordcountss;

import java.io.IOException;
import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.Text;

import org.apache.hadoop.conf.Configuration;
import org.apache.hadoop.fs.Path;
import org.apache.hadoop.mapreduce.Job;
import org.apache.hadoop.mapreduce.lib.input.FileInputFormat;
import org.apache.hadoop.mapreduce.lib.output.FileOutputFormat;

import java.lang.InterruptedException;
import java.lang.ClassNotFoundException;

public class Driver{
    public static void main(String[] args) throws IOException ,InterruptedException, ClassNotFoundException {

        Configuration conf = new Configuration();
        Job job = Job.getInstance(conf,"wordcountss");

        job.setJarByClass(Driver.class);
        job.setMapperClass(My_Mapper.class);
        job.setReducerClass(My_Reducer.class);

        job.setOutputKeyClass(Text.class);
        job.setOutputValueClass(IntWritable.class);

        FileInputFormat.addInputPath(job, new Path(args[0]));
        FileOutputFormat.setOutputPath(job, new Path(args[1]));

        job.waitForCompletion(true);|
    }
}

package log;

import java.io.IOException;
import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.Text;

import org.apache.hadoop.conf.Configuration;
import org.apache.hadoop.fs.Path;
import org.apache.hadoop.mapreduce.Job;
import org.apache.hadoop.mapreduce.lib.input.FileInputFormat;
import org.apache.hadoop.mapreduce.lib.output.FileOutputFormat;

public class Driver{
    public static void main(String[] args) throws IOException ,InterruptedException, ClassNotFoundException {

        Configuration conf = new Configuration();
        Job job = Job.getInstance(conf,"Log");

        job.setJarByClass(Driver.class);
        job.setMapperClass(My_Mapper.class);
        job.setReducerClass(My_Reducer.class);

        job.setMapOutputKeyClass(Text.class);
        job.setMapOutputValueClass(IntWritable.class);

        job.setOutputKeyClass(Text.class);
        job.setOutputValueClass(IntWritable.class);

        FileInputFormat.addInputPath(job, new Path(args[0]));
        FileOutputFormat.setOutputPath(job, new Path(args[1]));

        job.waitForCompletion(true);
    }
}
```