

```
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);
}
}
```