

```
import java.io.IOException;

import java.util.*;

import java.lang.Object;


import org.apache.hadoop.fs.Path;
import org.apache.hadoop.conf.*;
import org.apache.hadoop.io.*;
import org.apache.hadoop.mapreduce.*;
import org.apache.hadoop.mapreduce.Mapper.Context;
import org.apache.hadoop.mapreduce.lib.input.FileInputFormat;
import org.apache.hadoop.mapreduce.lib.input.TextInputFormat;
import org.apache.hadoop.mapreduce.lib.output.FileOutputFormat;
import org.apache.hadoop.mapreduce.lib.output.TextOutputFormat;


import Pi.Map;
import Pi.Reduce;
```

```
public class CountObjectSize {

    public static final String OBJECT = "Object";
    public static final String BACKGROUND = "Background";
    private static String WORD = "Word";


    protected void map(LongWritable key, Text value, Context context)
        throws java.io.IOException, InterruptedException {

        int tokens = value;

        for(String token : tokens){
            if value.getBytes()>15;

            Counter counter= context.getCounter(WORD, token);
```

```
        counter.increment(1);  
        System.out.println(counter);  
    }
```

```
public static class Reduce extends Reducer  
{  
    public void reduce(Text key, Iterable<IntWritable> values,  
        Context context) throws IOException, InterruptedException  
    {  
        int sum = 0;  
        for (IntWritable val : values) {  
            sum += val.get();  
        }  
        context.write(key, new IntWritable(sum));  
    }  
}
```

```
public static void main(String[] args) throws Exception  
{  
    Configuration conf = new Configuration();  
  
    Job job = new Job(conf, "Calculate Pi");  
    job.setJarByClass(Pi.class);  
    job.setOutputKeyClass(Text.class);  
    job.setOutputValueClass(IntWritable.class);  
  
    job.setMapperClass(Map.class);  
    job.setReducerClass(Reduce.class);  
    job.setCombinerClass(Reduce.class);
```

```
job.setInputFormatClass(TextInputFormat.class);  
job.setOutputFormatClass(TextOutputFormat.class);
```

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

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

```
}
```

```
}
```