

Step 1 : New->Java project -> Project_name

Add external libraries

Libraies->Add External jar files -> file system -> user ->select all jar files->

finish

Step 2 : Right click on src-> new-> class->class_name(WordCount)->next

Step 3 : copy code from the above link and save the file

<https://hadoop.apache.org/docs/current/hadoop-mapreduce-client/hadoop-mapreduce-client-core/MapReduceTutorial.html>

Code:

```
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);
}
}

```

Step 4 : click on export->Java->jar file->next->browse->save jar file as WordCount.jar->location choose desktop->next->finish

Step 5 : Create Sample.txt and save it on desktop

Step 6 : Create directory

```
hadoop dfs -mkdir /WordIn
```

```
cd Desktop/
```

```
hadoop dfs -copyFromLocal Sample.txt /WordIn
```

```
hadoop jar WordCount.jar WordCount /WordIn /WordOut
```