

Hadoop ④ (Minimum No)

③

IBH17CS054  
17-7-18

```
import java.IOException;
import java.util.*;
import org.apache.hadoop.fs.*;
import org.apache.hadoop.mapreduce.*;
import org.apache.hadoop.io.*;
import org.apache.hadoop.conf.*;
import org.apache.hadoop.mapreduce.lib.input.*;
import org.apache.hadoop.mapreduce.lib.output.*;
```

```
public class minimumno {
```

```
    public static class MMapper extends Mapper
        <LongWritable, Text, Text, IntWritable> {
```

```
        public void map(LongWritable key, Text value,
            Context context) throws Exception
```

```
        {
```

```
            String[] numbers = value.toString().split(" ");
```

```
            for (String num : numbers)
```

```
            {
```

```
                context.write(new Text("Min"),
```

```
                    new IntWritable(Integer.parseInt(
                        num)));
```

```
            }
```

```
        }
```

```
    public static class MReducer extends Reducer
        <Text, IntWritable, Text, IntWritable> {
```

```
        public void void reduce(Text key, Iterable<IntWritable>
            value, Context context) throws Exception
```

```
        {
```

Integer minno = Integer.MAX\_VALUE; ④ IBM17CS054

```
for (IntWritable val : values)
{
    if (val.get() < minno)
    {
        minno = val.get();
    }
}
```

```
context.write (key, new IntWritable(minno));
```

```
}
```

```
}
```

~~public static void main~~

```
public static void main (String[] args) throws Exception
```

```
{
```

```
Configuration conf = new Configuration();
```

```
Job job = Job.getInstance(conf, "Min");
```

```
job.setJarByClass (Minimumno.class);
```

```
job.setMapperClass (HMapper.class);
```

```
job.setReducerClass (HReducer.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);
```

```
}
```

```
}
```