```
1 import java.io.IOException;
 2 import java.util.Scanner;
 3 import org.apache.hadoop.fs.Path;
 4 import org.apache.hadoop.io.*;
5 import org.apache.hadoop.mapreduce.*;
6 import org.apache.hadoop.mapreduce.lib.input.*;
 7 import org.apache.hadoop.mapreduce.lib.output.*;
 8
 9 public class Simple {
       public static class MyMapper extends Mapper<</pre>
10
   Object,Text,IntWritable,DoubleWritable> {
11
           @Override
12
           public void map ( Object key, Text value,
   Context context )
13
                            throws IOException,
   InterruptedException {
14
               Scanner s = new Scanner(value.toString
   ()).useDelimiter(",");
15
               int x = s.nextInt();
               double y = s.nextDouble();
16
17
               context.write(new IntWritable(x),new
   DoubleWritable(y));
18
               s.close();
19
           }
       }
20
21
22
       public static class MyReducer extends Reducer<</pre>
   IntWritable, DoubleWritable, IntWritable,
   DoubleWritable> {
23
           @Override
24
           public void reduce ( IntWritable key,
   Iterable<DoubleWritable> values, Context context )
25
                               throws IOException,
   InterruptedException {
26
               double sum = 0.0;
27
               long count = 0;
               for (DoubleWritable v: values) {
28
29
                    sum += v.get();
30
                    count++;
31
               };
               context.write(key,new DoubleWritable(
32
```

```
32 sum/count));
33
           }
34
       }
35
       public static void main ( String[] args )
36
   throws Exception {
37
           Job job = Job.getInstance();
38
           job.setJobName("MyJob");
           job.setJarByClass(Simple.class);
39
40
           job.setOutputKeyClass(IntWritable.class);
41
           job.setOutputValueClass(DoubleWritable.
   class);
42
           job.setMapOutputKeyClass(IntWritable.class
   );
43
           job.setMapOutputValueClass(DoubleWritable.
   class);
44
           job.setMapperClass(MyMapper.class);
           job.setReducerClass(MyReducer.class);
45
           job.setInputFormatClass(TextInputFormat.
46
   class);
47
           job.setOutputFormatClass(TextOutputFormat.
   class);
48
           FileInputFormat.setInputPaths(job,new Path(
   args[0]));
49
           FileOutputFormat.setOutputPath(job, new Path
   (args[1]));
50
           job.waitForCompletion(true);
51
       }
52 }
53
```