Code :

Fruits.txt

1 apple orange mango
2 apple plum grapes
3 pineapple raspberry banana
4 banana orange apple
5 plum raspberry pomgranate
6 grapes grapes apple mango

WordCount.java

```
public class WordCount {

	public static class Map extends Mapper<Longwritable, Text, Text, IntWritable>
{

		private final static IntWritable one = new IntWritable(1);

		private Text word = new Text();

		public void map(Longwritable key, Text value, Context context)
		throws IOException, InterruptedException {

			String line = value.toString();
			StringTokenizer tokenizer = new StringTokenizer(line);
			while (tokenizer.hasMoreTokens()) {

				word.set(tokenizer.nextToken());
				context.write(word, one);
		}
	}
}
```

```
public static class Reduce extends Reducer<Text, Intwritable, Text, Intwritable> {
        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, "wordcount");
         job.setOutputKeyClass (Text.class);
         job.setOutputValueClass(Intwritable.class)
        ; job.setMapperClass(Map.class);
         job.setReducerClass(Reduce.class);
         job.setInput FormatClass (TextInput Format.class);
         job.setOutputFormatClass (TextOutputFormat.class);
         FileInputFormat. addInputPath(job, new Path(args[0]));
        FileOutputFormat.setOutputPath(job, new Path(args[1]));
        job.waitForCompletion(true);
}
}
```

Output :

Steps to compile and execute:

- $ mkdir words
- // Download hadoop-core-1.2.1.jar,
- $ javac -classpath hadoop-core-1.2.1.jar words/WordCount.java
- $ jar -cvf words.jar -C words/ .
  - $hadoop fs -mkdir /input
- $hadoop fs -put fruits.txt /input
- $hadoop fs -ls /input
- $hadoop jar words.jar WordCount /input /output
- $hadoop fs -ls /output
- $hadoop fs -cat /output/part-r-00000
- $hadoop fs -get /output/part-r-00000