**AIM:** To write a map reduce program to implement identity reducer in word count.

**PROGRAM:**

**/\*MAPPER\*/**

import java.io.\*;

import java.util.\*;

import org.apache.hadoop.io.\*;

import org.apache.hadoop.mapreduce.\*;

public class WordMapper extends Mapper<LongWritable,Text,Text,LongWritable>

{

LongWritable one= new LongWritable(1);

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

{

int i;

String line=value.toString();

String[]wordsinline=line.split(" ");

for(i=0;i<wordsinline.length;i++)

context.write(new Text(wordsinline[i]),one);

}

}

**/\*REDUCER\*/**

import java.util.\*;

import java.io.\*;

import org.apache.hadoop.io.\*;

import org.apache.hadoop.mapreduce.\*;

public class WordReducer extends Reducer <Text,LongWritable,Text,LongWritable>

{

public void reduce(Text key,LongWritable values,Context context)throws IOException,InterruptedException

{

context.write(key,values);

}

}

**/\*DRIVER\*/**

import java.util.\*;

import java.io.\*;

import org.apache.hadoop.io.\*;

import org.apache.hadoop.mapreduce.\*;

import org.apache.hadoop.fs.Path;

import org.apache.hadoop.conf.Configuration;

import org.apache.hadoop.mapreduce.lib.input.FileInputFormat;

import org.apache.hadoop.mapreduce.lib.output.FileOutputFormat;

import org.apache.hadoop.mapreduce.lib.input.TextInputFormat;

import org.apache.hadoop.mapreduce.lib.output.TextOutputFormat;

public class WordCount

{

public static void main(String arg[])throws Exception

{

Configuration conf=new Configuration();

Job job=Job.getInstance(conf,"xyz");

job.setOutputKeyClass(Text.class);

job.setOutputValueClass(LongWritable.class);

job.setMapperClass(WordMapper.class);

job.setReducerClass(WordReducer.class);

FileInputFormat.setInputPaths(job,new Path(arg[0]));

FileOutputFormat.setOutputPath(job,new Path(arg[1]));

job.setJarByClass(WordCount.class);

job.waitForCompletion(true);

}

}

**OUTPUT :**

