**DSBDA LAB**

**GROUP A , ASS 2**

**Word count using Hadoop Mapreduce**

//**Driver**

import java.io.IOException;

import java.net.URI;

import java.util.Scanner;

import org.apache.hadoop.conf.Configuration;

import org.apache.hadoop.fs.FSDataInputStream;

import org.apache.hadoop.fs.FileSystem;

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.lib.input.FileInputFormat;

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

import java.lang.InterruptedException;

import java.lang.ClassNotFoundException;

public class main\_A {

public static void main(String[] args) throws IOException,InterruptedException,ClassNotFoundException{

Configuration conf=new Configuration();

Job job=Job.getInstance(conf,"Word\_count");

job.setJarByClass(main\_A.class);

job.setMapperClass(mapper1.class);

job.setReducerClass(reducer1.class);

job.setOutputKeyClass(Text.class);

job.setOutputValueClass(IntWritable.class);

FileInputFormat.addInputPath(job, new Path(args[0]));

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

job.waitForCompletion(true);

}

}

// **Mapper**

import java.io.IOException;

import java.util.StringTokenizer;

import org.apache.hadoop.io.IntWritable;

import org.apache.hadoop.io.Text;

import org.apache.hadoop.mapreduce.Mapper;

public class mapper1 extends Mapper<Object,Text,Text,IntWritable>{

public void map(Object offset,Text key,Context con) throws IOException,InterruptedException {

StringTokenizer token=new StringTokenizer(key.toString()," ");

while(token.hasMoreTokens())

con.write(new Text(token.nextToken()),new IntWritable(1));

}

}

// **Reducer**

import java.io.IOException;

import org.apache.hadoop.io.IntWritable;

import org.apache.hadoop.io.Text;

import org.apache.hadoop.mapreduce.Reducer;

public class reducer1 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));

}

}



