package seven;  
import java.io.IOException;  
import org.apache.hadoop.conf.Configuration;  
import org.apache.hadoop.fs.Path;  
import org.apache.hadoop.io.LongWritable;  
import org.apache.hadoop.io.Text;  
import org.apache.hadoop.mapreduce.Job;  
import org.apache.hadoop.mapreduce.Mapper;  
import org.apache.hadoop.mapreduce.Reducer;  
import org.apache.hadoop.mapreduce.lib.input.FileInputFormat;  
import org.apache.hadoop.mapreduce.lib.output.FileOutputFormat;  
  
  
  
public class Appl{  
  
public static class MyMapper extends Mapper<LongWritable,Text,Text,LongWritable> {  
 LongWritable one = new LongWritable(1);  
   
 public void map(LongWritable key, Text value, Context context) throws java.io.IOException, InterruptedException   
 {  
 if(key.get()>0)  
 {  
 String row = value.toString();  
 String [] tokens = row.split("\t");  
 String cs=new String(tokens[1]);  
 String yr=new String(tokens[7]);  
 if(cs !=null&& yr!=null && !yr.equals("NA"))   
 {  
 Text fin = new Text(yr);  
 context.write(fin,one);  
 }  
 }  
 }  
 }  
   
  
  
  
   
 public static class MyReducer extends Reducer<Text,LongWritable, Text, LongWritable>   
 {  
   
 public void reduce(Text key, Iterable<LongWritable> values,Context context) throws IOException,InterruptedException  
 {  
 long total=0;  
 for(LongWritable vk:values)  
 {  
 total += vk.get();  
 }  
 context.write(key,new LongWritable(total));  
   
 }  
 }  
   
   
   
 public static void main(String[] args)   
 throws IOException, ClassNotFoundException, InterruptedException {  
   
 Configuration conf = new Configuration();  
 Job job = Job.getInstance(conf);  
 job.setJarByClass(Appl.class);  
 job.setMapperClass(MyMapper.class);  
 job.setReducerClass(MyReducer.class);  
 job.setNumReduceTasks(1);  
 job.setOutputKeyClass(Text.class);  
 job.setOutputValueClass(LongWritable.class);  
 FileInputFormat.addInputPath(job, new Path(args[0]));  
 FileOutputFormat.setOutputPath(job, new Path(args[1]));  
 System.exit(job.waitForCompletion(true) ? 0 : 1);  
 }  
}