

Q1)**Input files:**

```
1,Yash Bhatia,22,male,mumbai,accountant
2,Ashish Gupta,28,male,pune,clerk
3,Akshay Jadhav,30,male,delhi,engineer
4,Sooraj Patil,27,male,gurgaon,teacher
5,Neha Singh,26,female,thane,lawyer
6,Arpita Khan,27,female,aurangabad,architect
7,Shubham Patil,26,male,pune,technician
8,Drishti Das,29,female,nagpur,dentist
9,Abhishek Singh,30,male,nashik,designer
10,Tejas Patil,28,male,mumbai,chef
11,Alka Ahuja,29,female,panvel,dietitian
12,Jaya Surve,30,female,thane,therapist
13,Hema Khanna,31,female,nanded,doctor
14,Alia Mehra,29,female,mumbai,actor
15,rohit Sharma,31,male,navi mumbai,cricketer
```

Code:

```
import java.io.IOException;

import org.apache.hadoop.fs.Path;

import org.apache.hadoop.conf.*;

import org.apache.hadoop.io.*;

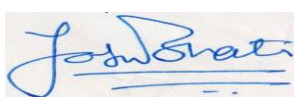
import org.apache.hadoop.mapreduce.*;

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

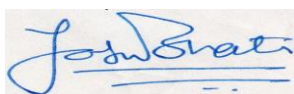
import org.apache.hadoop.mapreduce.lib.input.TextInputFormat;

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

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



```
public class Average_age {  
  
    public static class Map extends Mapper<LongWritable, Text, Text,  
IntWritable> {  
  
        private Text gender = new Text();  
        private IntWritable age = new IntWritable();  
  
        public void map(LongWritable key, Text value, Context context)  
throws IOException, InterruptedException  
        {  
  
            String line = value.toString();  
            String str[] = line.split(" ");  
            if (str.length > 6) {  
  
                gender.set(str[4]);  
  
                if ((str[1].equals("0"))) {  
  
                    if (str[5].matches("\\d+")) {  
                        int i = Integer.parseInt(str[5]);  
                        age.set(i);  
                    }  
                }  
            }  
            context.write(gender, age);  
        }  
    }  
}
```



```
}
```

```
    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;

            int l = 0;

            for (IntWritable val : values) {

                l += 1;

                sum += val.get();

            }

            sum = sum / l;

            context.write(key, new IntWritable(sum));

        }

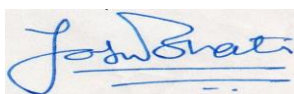
    }
```

```
public static void main(String[] args) throws Exception
{

    Configuration conf = new Configuration();

    @SuppressWarnings("deprecation")
    Job job = new Job(conf, "Averageage_survived");

    job.setJarByClass(Average_age.class);
```



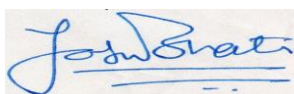
```
        job.setMapOutputKeyClass(Text.class);
        job.setMapOutputValueClass(IntWritable.class);

        job.setNumReduceTasks(0);
        job.setOutputKeyClass(Text.class);
        job.setOutputValueClass(IntWritable.class);

        job.setMapperClass(Map.class);
        job.setReducerClass(Reduce.class);

        job.setInputFormatClass(TextInputFormat.class);
        job.setOutputFormatClass(TextOutputFormat.class);

        FileInputFormat.addInputPath(job, new Path(args[0]));
        FileOutputFormat.setOutputPath(job, new Path(args[1]));
        Path out = new Path(args[1]);
        out.getFileSystem(conf).delete(out);
        job.waitForCompletion(true);
    }
}
```



Output:**File: [/user/](#)[Customer/](#)[otp2/](#)part-r-00000**

Goto :

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female	28
male	30

Q2**Code:**

```
grunt> COUNT(customer)

grunt> student_details = LOAD
'hdfs://localhost:9000/pig_data/customer_details.txt' USING
PigStorage(',')
  as (id:int, firstname:chararray, lastname:chararray, age:int,
phone:chararray, city:chararray, gpa:int);
grunt> customer_group_all = Group customer_details All;
grunt> Dump customer_group_all;

(all,{( 1,Yash Bhatia,22,male,mumbai,accountant
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14,Alia Mehra,29,female,mumbai,actor
15,rohit Sharma,31,male,navi mumbai,cricketer) })
grunt> student_count = foreach customer_group_all Generate
COUNT(customer_details.gpa);
grunt> Dump customer_count;
```

