JAVA LAB DA 4 part 1

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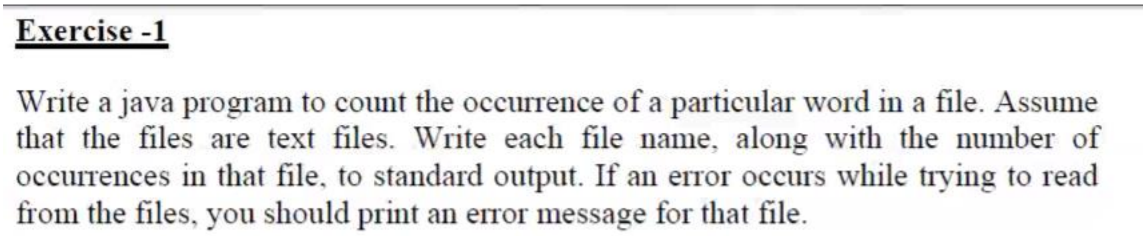


Exercise -1

Write a java program to count the occurrence of a particular word in a file. Assume that the files are text files. Write each file name, along with the number of occurrences in that file, to standard output. If an error occurs while trying to read from the files, you should print an error message for that file.

ANS

Make 2 files 1 demo.txt file and 1 code file in same directory

CODE

```
import java.io.BufferedReader;
import java.io.FileReader;
import java.io.IOException;
import java.util.Scanner;

public class fileread
{
    public static void main(String[] args) throws IOException {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the word to be searched");
        String wordtofind=sc.next();
        sc.close();
        String line;
        int count = 0;
        FileReader file = new FileReader("demo.txt");
        BufferedReader br = new BufferedReader(file);
        while((line = br.readLine()) != null) {
            String words[] = line.split(" ");
            for(int i=0;i<words.length;i++){
                if(words[i].equals(wordtofind))count++;
            }
        }

        System.out.println("Number of words present in given file: " + count);
        br.close();
    }
}
```

DEMO.txt

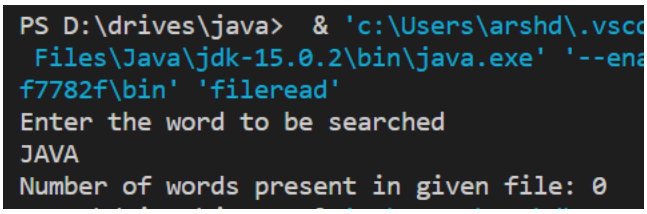
java is a programming language.

java test file .

blah blah blah .

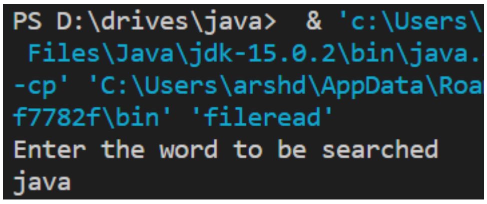
OUTPUTS

1. JAVA



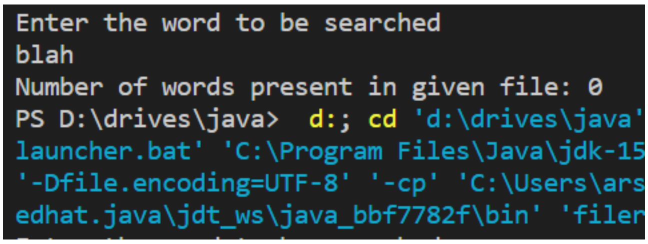
```
PS D:\drives\java>  & 'c:\Users\arshd\.vsc
 Files\Java\jdk-15.0.2\bin\java.exe' '--en
f7782f\bin' 'fileread'
Enter the word to be searched
JAVA
Number of words present in given file: 0
```

2. java



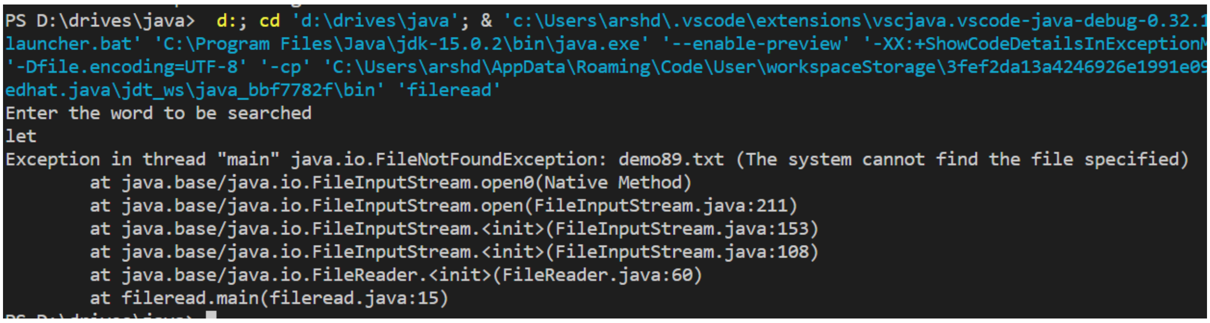
```
PS D:\drives\java>  & 'c:\Users\
 Files\Java\jdk-15.0.2\bin\java.
-cp' 'C:\Users\arshd\AppData\Roa
f7782f\bin' 'fileread'
Enter the word to be searched
java
```

3. blah

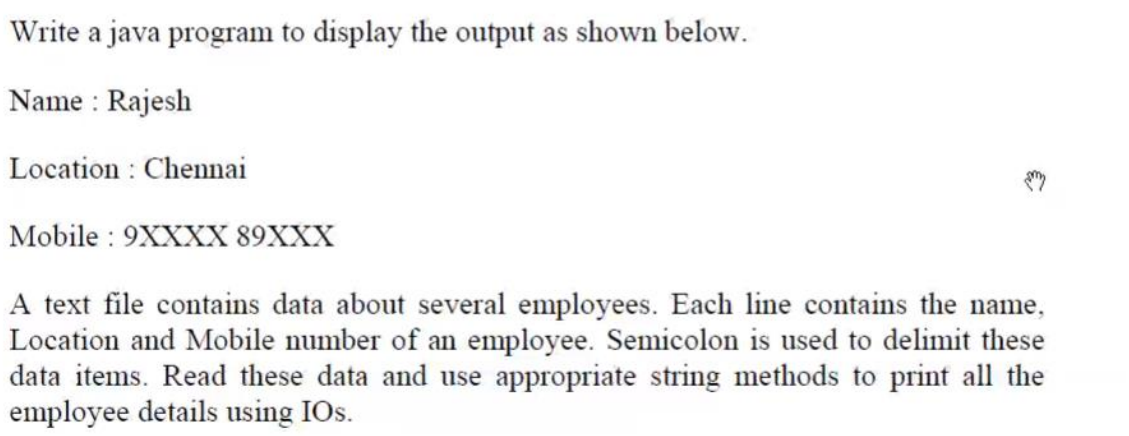


```
Enter the word to be searched
blah
Number of words present in given file: 0
PS D:\drives\java>  d:; cd 'd:\drives\java'
launcher.bat' 'C:\Program Files\Java\jdk-15
'-Dfile.encoding=UTF-8' '-cp' 'C:\Users\ars
edhat.java\jdt_ws\java_bbf7782f\bin' 'file
```

4. if file demo.txt deleted



```
PS D:\drives\java>  d:; cd 'd:\drives\java'; & 'c:\Users\arshd\.vscode\extensions\vscjava.vscode-java-debug-0.32.
launcher.bat' 'C:\Program Files\Java\jdk-15.0.2\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInException
'-Dfile.encoding=UTF-8' '-cp' 'C:\Users\arshd\AppData\Roaming\Code\User\workspaceStorage\3fef2da13a4246926e1991e0
edhat.java\jdt_ws\java_bbf7782f\bin' 'fileread'
Enter the word to be searched
let
Exception in thread "main" java.io.FileNotFoundException: demo89.txt (The system cannot find the file specified)
        at java.base/java.io.FileInputStream.open0(Native Method)
        at java.base/java.io.FileInputStream.open(FileInputStream.java:211)
        at java.base/java.io.FileInputStream.<init>(FileInputStream.java:153)
        at java.base/java.io.FileInputStream.<init>(FileInputStream.java:108)
        at java.base/java.io.FileReader.<init>(FileReader.java:60)
        at fileread.main(fileread.java:15)
```



Write a java program to display the output as shown below.

Name : Rajesh

Location : Chennai

Mobile : 9XXXX 89XXX

A text file contains data about several employees. Each line contains the name, Location and Mobile number of an employee. Semicolon is used to delimit these data items. Read these data and use appropriate string methods to print all the employee details using IOs.

CODE FILE

```
import java.io.BufferedReader;
import java.io.FileReader;

public class rajeshoccur {
    public static void main(String[] args) throws Exception{
        String line;
        FileReader file = new FileReader("demo1.txt");
        BufferedReader br = new BufferedReader(file);
        while((line = br.readLine()) != null) {
            String words[] = line.split(";");
            for(int i=0;i<words.length;i++){
                String data[] = words[i].split(",");
                    System.out.println("_____________");
                    System.out.println("Name: "+data[0]);
                    System.out.println("Location: "+data[1]);
                    System.out.println("Mobile: "+data[2]);
            }
        }
        System.out.println("_____________");
        br.close();
    }
}
```

Demo1.txt

```
Rajesh,chennai,90000000;

Ramesh,delhi,9111111111;
```

Rajesh,Delhi,9898989898;

Gurleen,chennai,90000000;

Sambit,delhi,9111111111;

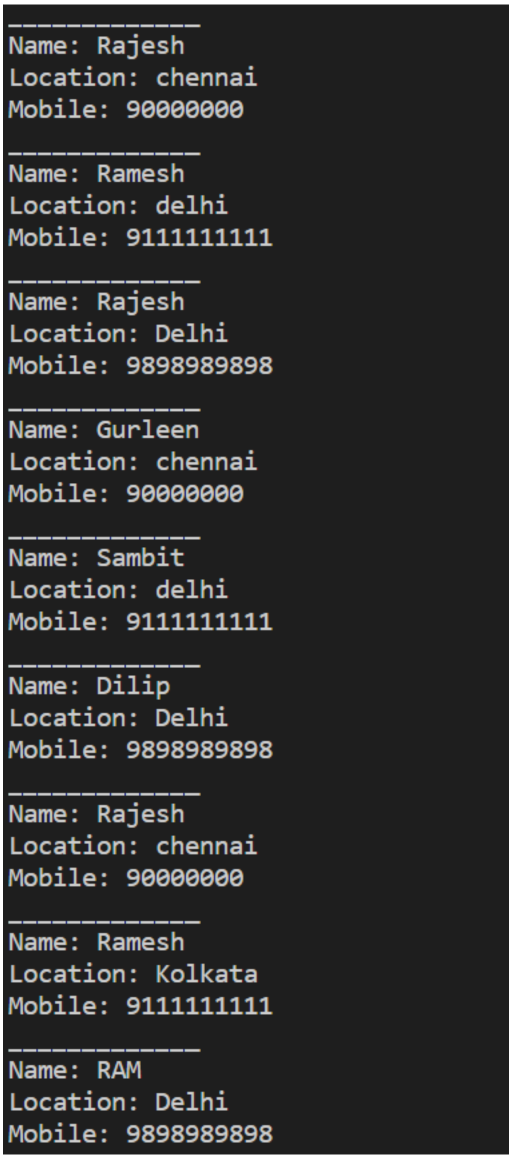
Dilip,Delhi,9898989898;

Rajesh,chennai,90000000;

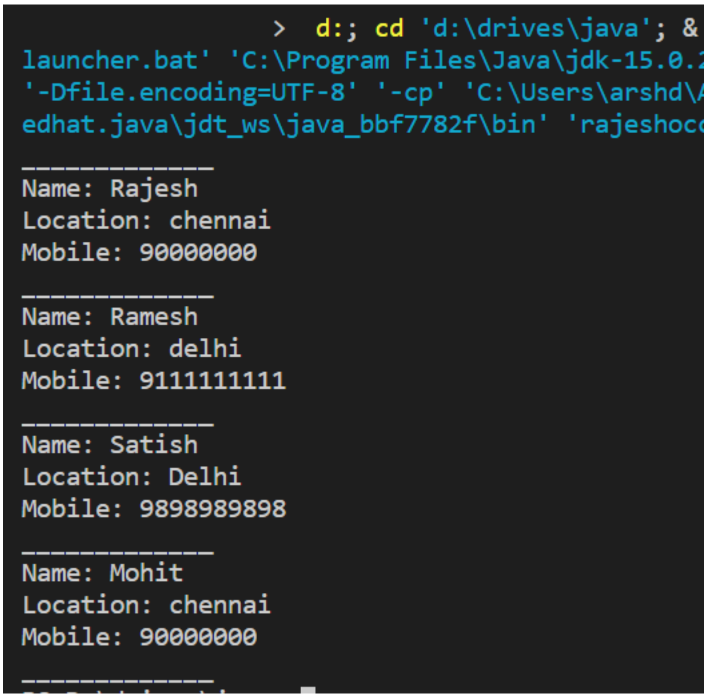
Ramesh,Kolkata,9111111111;

RAM,Delhi,9898989898;

OUTPUT



```
-------------
Name: Rajesh
Location: chennai
Mobile: 90000000

-------------
Name: Ramesh
Location: delhi
Mobile: 9111111111

-------------
Name: Rajesh
Location: Delhi
Mobile: 9898989898

-------------
Name: Gurleen
Location: chennai
Mobile: 90000000

-------------
Name: Sambit
Location: delhi
Mobile: 9111111111

-------------
Name: Dilip
Location: Delhi
Mobile: 9898989898

-------------
Name: Rajesh
Location: chennai
Mobile: 90000000

-------------
Name: Ramesh
Location: Kolkata
Mobile: 9111111111

-------------
Name: RAM
Location: Delhi
Mobile: 9898989898
```



```
                 >  d:; cd 'd:\drives\java'; &
launcher.bat' 'C:\Program Files\Java\jdk-15.0.
'-Dfile.encoding=UTF-8' '-cp' 'C:\Users\arshd\
edhat.java\jdt_ws\java_bbf7782f\bin' 'rajeshoc
--------------
Name: Rajesh
Location: chennai
Mobile: 90000000
--------------
Name: Ramesh
Location: delhi
Mobile: 9111111111
--------------
Name: Satish
Location: Delhi
Mobile: 9898989898
--------------
Name: Mohit
Location: chennai
Mobile: 90000000
--------------
```

change in demo1 causes new output

JAVA LAB DA 4 part 2

Exercise-3

Write a program that prompts the user to enter the name of the Team in the command line interface. Use the txt file from the link to read the no of matches played data for both home and away category. Display the win percentage both Home and away and write it as object in the local disk with the team name (csk.ser). Display the message Team Not found Info if the team name is not available.

Dataset Link:

https://drive.google.com/file/d/1nj8O5angva0lKtuHSWNG-bjUKveEG9m8/view?usp=sharing

Sample Output:-

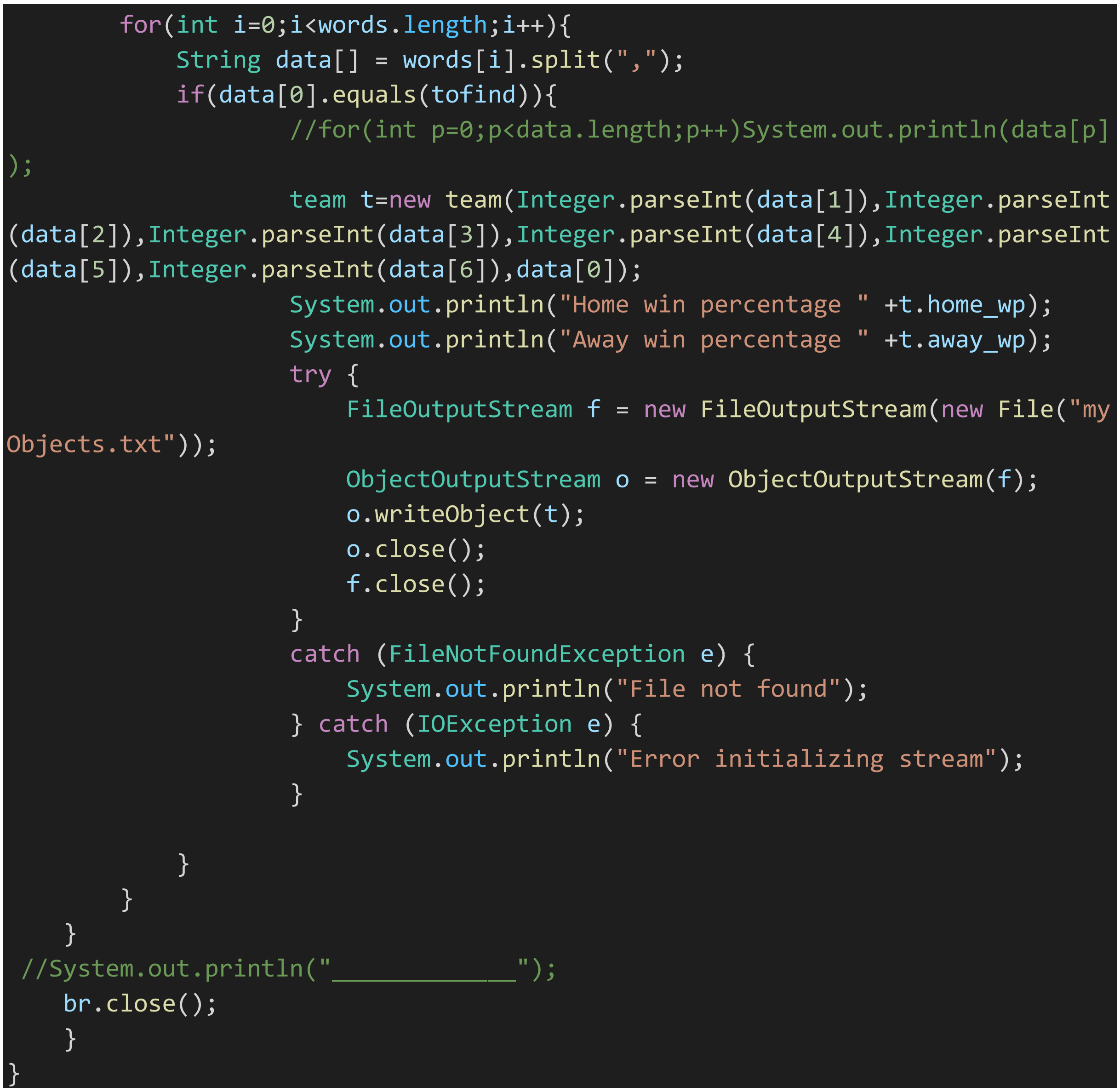
Name of the Team : Chennai Super Kings

Home Win % : 57.8

Away win % : 60.5

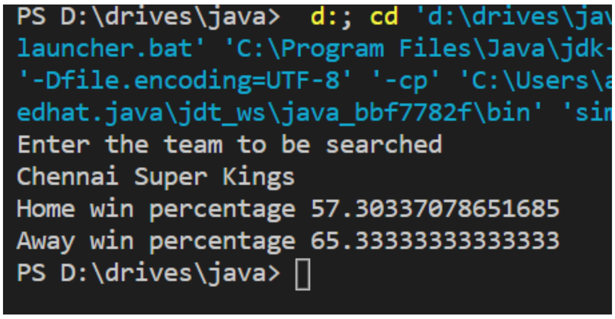
CODE

```java
import java.io.BufferedReader;
import java.io.File;
import java.io.FileNotFoundException;
import java.io.FileReader;
import java.io.IOException;
import java.util.Scanner;
import java.io.FileOutputStream;
import java.io.ObjectOutputStream;
import java.io.Serializable;
class team implements Serializable{
    /**
     *
     */
    private static final long serialVersionUID = 1L;
    int home_wins;
    int away_wins;
    int total_wins;
    int home_matches;
    int away_matches;
    int total_matches;
    String team_name;
    double home_wp;double away_wp;
    public team(int h,int a,int t,int hm,int am,int tm,String tn){
        this.home_wins=h;
        this.away_wins=a;
        this.total_wins=t;
        this.home_matches=hm;
        this.away_matches=am;
        this.total_matches=tm;
        this.team_name=tn;
        this.home_wp=((double)h/(double)hm)*100;
        this.away_wp=((double)a/(double)am)*100;
    }
}
public class simq3 {

 public static void main(String[] args) throws Exception{
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter the team to be searched");
    String tofind=sc.nextLine();
    sc.close();
    String line;
    FileReader file = new FileReader("Teams.txt");
    BufferedReader br = new BufferedReader(file);
    while((line = br.readLine()) != null) {
        String words[] = line.split(";");
```



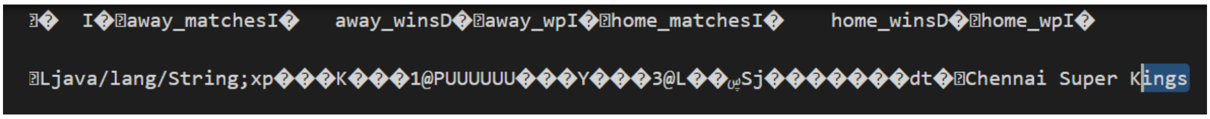
```
        for(int i=0;i<words.length;i++){
            String data[] = words[i].split(",");
            if(data[0].equals(tofind)){
                    //for(int p=0;p<data.length;p++)System.out.println(data[p]
);
                    team t=new team(Integer.parseInt(data[1]),Integer.parseInt
(data[2]),Integer.parseInt(data[3]),Integer.parseInt(data[4]),Integer.parseInt
(data[5]),Integer.parseInt(data[6]),data[0]);
                    System.out.println("Home win percentage " +t.home_wp);
                    System.out.println("Away win percentage " +t.away_wp);
                    try {
                        FileOutputStream f = new FileOutputStream(new File("my
Objects.txt"));
                        ObjectOutputStream o = new ObjectOutputStream(f);
                        o.writeObject(t);
                        o.close();
                        f.close();
                    }
                    catch (FileNotFoundException e) {
                        System.out.println("File not found");
                    } catch (IOException e) {
                        System.out.println("Error initializing stream");
                    }

            }
        }
    }
 //System.out.println("_____________");
    br.close();
    }
}
```

Output



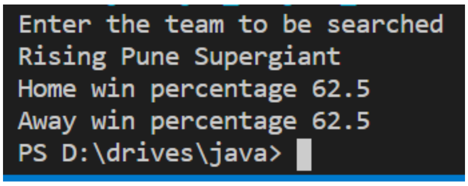
```
PS D:\drives\java>  d:; cd 'd:\drives\jav
launcher.bat' 'C:\Program Files\Java\jdk-
'-Dfile.encoding=UTF-8' '-cp' 'C:\Users\a
edhat.java\jdt_ws\java_bbf7782f\bin' 'sim
Enter the team to be searched
Chennai Super Kings
Home win percentage 57.30337078651685
Away win percentage 65.33333333333333
PS D:\drives\java> ▯
```

Output file



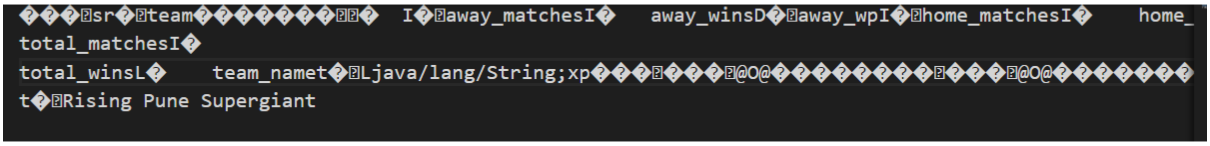
```
� I��away_matchesI�    away_winsD��away_wpI��home_matchesI�     home_winsD��home_wpI�

Ljava/lang/String;xp���K���1@PUUUUUU���Y���3@L��يSj��������dt��Chennai Super Kings
```

Output 2



```
Enter the team to be searched
Rising Pune Supergiant
Home win percentage 62.5
Away win percentage 62.5
PS D:\drives\java> 
```

Output file generated



```
���▯sr�▯team�������▯▯�  I�▯away_matchesI�   away_winsD�▯away_wpI�▯home_matchesI�    home_
total_matchesI�
total_winsL�    team_namet�▯Ljava/lang/String;xp���▯���▯@O@��������▯���▯@O@�������
t�▯Rising Pune Supergiant
```