Homework 2

Goal：

You need to do some SQL query about the dataset we offer.

DeadLine:

2017.04.10 23:59:59

Dataset：

the dataset is about European soccer. It contains:

- +25,000 matches
- +10,000 players
- 11 European Countries with their lead championship
- Seasons 2008 to 2016

1.You can download the dataset from here:

https://www.kaggle.com/hugomathien/soccer/downloads/soccer.zip

the database is Sqlite format. You can use database software **sqlite3** to open it and you don't need to load it to the database. If your OS is Windows, you may install the software first. If your OS is linux or OS X, you can use it by terminal directly.

2.the description of dataset url is:

https://www.kaggle.com/hugomathien/soccer

Homework Title Format:

Group4_{{yourStudentID}}.pdf

Answer Format:

【each anwser to the tasks need to contain the SQL, time and the answer】

Example： 0. How many records in the dataset

```
SQL:     SELECT COUNT(*)
     FROM ontime
Time: 86.71592 sec
Ans: 35,874,731
```

Task:

1. How many players are record in the table Player?
   總共有多少球員被記錄在table Player中?

2. How many matches are record in the table from season 2008/2009 to season 2011/2012?Please use **between** syntax.
   從2008/2009賽季到2011/2012賽季，一共進行了多少場比賽?請用between語法。

3. What is the number of players who born in 1992. Please use **like** syntax.
   一共有多少球員出生在1992年?請用like語法。

4. Which players have the best in heading accuracy?If the number of them is over 10, list 10 of them and the total count.
   哪些球員的頭球水平最高?如果超過10，列出總數量，並列出10位名字。

5. please count the average ball control ability of all players.
   請計算出球員們的平均控球能力。

6. What is the range of crossing ability of the players whose attacking_work_rate is medium?
   進攻效率評價為中等(medium)的球員的過人能力範圍是多少（crossing最低值和最高值）

7. Which one's overall rating is higher, the players prefer to right foot or left foot?
   左腳球員整體評價更高，還是右腳球員整體評價更高?

8. Which players have the highest potential who are born after 1992. If the number of them is over 10, list 10 of them and the total count.
   出生在1992年之後的球員,潛力最大的球員是哪一些? 如果超過10，列出總數量，並列出10位名字。

9. Which team don't have attribute record in 2012, please list the team name. If the number of them is over 10, list 10 of them and the total count.
   2012年有哪些球隊沒有屬性紀錄，請列出球隊名字。如果超過10，列出總數量，並列出10位名字。

10. Which team win the most matches when they are the home team? And the same question for the away team.
    哪只球隊在2009/2010賽季在主場贏得了最多的比賽?(在該比賽中進球數超過對方球隊，home_team是主場球隊，away_team是客場球隊)哪只球隊在2009/2010賽季在客場贏得了最多的比賽?

11. bonus. query any thing you think is important or meaningful. You can answer in any format, and don't need to obey the answer format requirement.(please contain the sql)
    請任意查詢一些你認為有意義或者很重要的資料，開放性問題的答案可以是任意形式，不需要遵循答案格式。請包括sql語句。

Ref:
● NCTU CSCC Database Service
  https://www.cs.nctu.edu.tw/cscc/mysql/