ISS Lab Task: SQLite

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1 Task

You have been provided with a file *ipl.db* which is a database on Indian Premier League. These kind of databases are used by different commentators and cricket analysts and it might play an important role while building teams in fantasy league.

For this lab, you have to perform SQLite queries to solve the following questions

1.1 Print Umpires - 15 marks

Print any 10 umpires from the umpires table. LIMIT clause should be used.

Output Print "Umpire names: " followed by the names of the umpires(separated by commas (,) in a single line).

1.2 Umpire countries - 15 marks

How many different countries does the umpires belong to?

Output Print "The number of countries the umpires belong to are: " followed by the number of countries.

1.3 Venue names - 15 marks

Print the venue names in ascending alphabetical order.

Output Print "Umpire names in alphabetical order: " followed by the venue names(separated by commas (,) in a single line).

1.4 Australian players - 15 marks

Print the names of all the Australian players in the database. The *country_id* of Australia is 5.

Output Print "Australian players: " followed the names of the Australian players(separated by commas (,) in a single line).

1.5 CSK or RCB - 40 marks

How many matches did the team "Chennai Super Kings" win more than "Royal Challengers Bangalore" in total? You can use multiple SQL queries for this question.

1.6 Extra questions - 0 marks

After you are done with the above questions, you can try to perform queries for the questions below. They need not to be submitted as they aren't graded. However, some of them might need more knowledge about RDBMS or contextual knowledge.

- How many players are younger than 25?
- What is the win percentage at Wankhede stadium after winning the toss?
- What are the top 10 highest scores in IPL? Which players have most centuries in IPL? How many players have made a half century and taken 3 wickets in the same match? Which player has the most 5 wicket hauls in IPL?
- In how many matches did RCB lose after Virat Kohli scored a half century but not a century? How many of them happened while RCB was chasing?
- What is the strike-rate of MS Dhoni against the left ball spinners? How much does it become in the death overs?

2 Instructions

- Do all the questions sequentially one after another. The outputs should be printed in terminal.
- Please read the entire document carefully to get a good idea on how it is to be implemented before commencing. Your output should follow the output requirements of the questions
- Complete the given tasks before the lab ends i.e. 5PM.
- Submission to be made on Moodle only. **Submit a zip file as <roll_number>.zip, containing only the** .py **file named as <roll_number>.py file.** No need to submit the other files like db, intermediary files, etc.
- For the file paths, you can assume that the file names will be same as mentioned in the doc. There's no need to take input for different file names. Also the files will be present in the same directory as the python file while evaluating.
- The submissions are most probably going to be evaluated automatically. So make sure you follow the instructions and I/O format correctly. There might be upto **20% penalty** for not following correctly.
- For the Love of God **don't copy**! If you have any doubts feel free to ask the TAs in your respective channel.