**Atlanta Braves – SQL Questions 2019**

For these exercises, you will be using a SQLite database and your knowledge of SQL to answer a few baseball-related questions.

Some documentation that may help you familiarize yourself with SQL can be found here:

[www.youtube.com/watch?v=wkUx-jJ989w](http://www.youtube.com/watch?v=wkUx-jJ989w)

<https://www.youtube.com/watch?v=pd63oLiAVAQ>

<https://cs.stanford.edu/people/widom/cs145/sqlite/SQLiteLoad.html>

<https://www.tutorialspoint.com/sqlite/sqlite_syntax.htm>

Download SQLite and use the “.open main” command to load the attached “main” database. The structure of the three tables in this database is as follows:

**WAR** – A table of yearly batting WAR values by player from 2000-2005 (primary key: playerID/yearID)

**PERF** – A table of aggregated stint-level pitching performance by player (primary key: playerID/teamID/yearID)

**PITCHBYPITCH** – A table of pitch-level data (primary key: GameKey, INNING, PA\_OF\_INNING, TOP\_BOT ,PITCH\_OF\_PA) that contains 1=yes and 0=no flag columns for whether different outcomes occurred on that pitch (single, double, triple, home run, hit, out, strikeout), information about the count before the pitch (BALLS, STRIKES), and a flag column for whether that pitch was the last pitch of the plate appearance.

Once you have loaded the data, this exercise should not take more than one hour. Please include all of your code with your responses. If you do not know how to complete one or more of the questions, feel free to leave them blank.

1. **List all batters that had between 5 and 6 WAR in the period from 2002-2003, in descending order of their WAR totals**
2. **Write a query that returns every pitcher on the Atlanta Braves in 2018, along with three 1/0 indicator columns for whether they reached the 1+ WAR, 2+ WAR, or 3+ WAR cutoff in that year, along with a fourth column for their total yearly WAR**
3. **How many singles did Jonny Venters give up in plate appearances that passed through 1-0 counts?**
4. **How many streaks of 3 consecutive PA ending in strikeouts did Shane Carle have (not necessarily in the same game)?**