

Query:

```
SELECT
    p.fullname,
    pl.PitchTypeCode,
    ROUND(AVG(pl.PitchSpeed), 2) AS AvgPitchSpeed
FROM
    play pl
JOIN
    events e ON pl.EventId = e.EventId
JOIN
    (select * from venue where name ILIKE '%stadium%') v ON e.VenueId = v.VenueId
JOIN
    person p ON pl.PersonId = p.PersonId
GROUP BY
    p.fullname,
    pl.PitchTypeCode
ORDER BY p.fullname
```

Explanation:

This SQL query is designed to retrieve information about baseball pitches, focusing on the average pitch speed by pitcher and pitch type, specifically for events held at venues with "stadium" in their names. Here's a breakdown:

1. SELECT Clause:

- o `p.fullname`: The query retrieves the full name of the pitcher (person).
- o `pl.PitchTypeCode`: Retrieves the type of pitch (e.g., fastball, curveball).
- o `ROUND(AVG(pl.PitchSpeed), 2) AS AvgPitchSpeed`: Calculates the average pitch speed for each pitcher and pitch type, rounded to two decimal places.

2. FROM and JOIN Clauses:

- o The query pulls data from multiple tables (`play`, `events`, `venue`, and `person`).
- o **play pl**: Main table with pitch information, including pitch speed and type.
- o **events e**: Joins `play` and `events` to get the event details related to each pitch.
- o **venue v**: Filters the venue data to only include those with "stadium" in their name using the `ILIKE` operator (case-insensitive search).
- o **person p**: Joins `play` and `person` tables to associate pitches with the pitcher's name.

3. GROUP BY Clause:

- o Groups the results by the pitcher's full name and the type of pitch.

4. ORDER BY Clause:

- o Sorts the final result by the pitcher's name in alphabetical order.