Average Exit Velocity

To calculate the average exit velocity for both the Home and Away teams, I began by creating a new dataframe in Python using only the necessary columns from the combined dataset: `PitchId`, `BatterTeam`, `PitchCall`, and `ExitSpeed`. Using the `PitchCall` column, I filtered the data to include only rows where `PitchCall == "InPlay"`. This ensured that the dataframe contained only batted balls that were officially put into play. Next, I used the `GroupBy` function in Pandas to calculate the mean exit velocity for each team based on the `BatterTeam` column. This provided the average exit velocity for the Home and Away teams separately. Finally, I identified that SPR_CAR was the Home Team and WIC_SUR was the Away Team, leading to the final results shown below.

Results:

- **Home Team (SPR_CAR):** 88.06 mph
- **Away Team (WIC_SUR):** 82.23 mph

Process Summary:

1. Selected relevant columns (`PitchId, BatterTeam, PitchCall, ExitSpeed`)
2. Filtered `PitchCall` to include only `"InPlay"` values
3. Grouped by `BatterTeam` and calculated mean `ExitSpeed`