## **a)**

The Data Model for the given CSV files which contain details of IPL (Indian Premier League) from 2008 to 2019 is shown below.

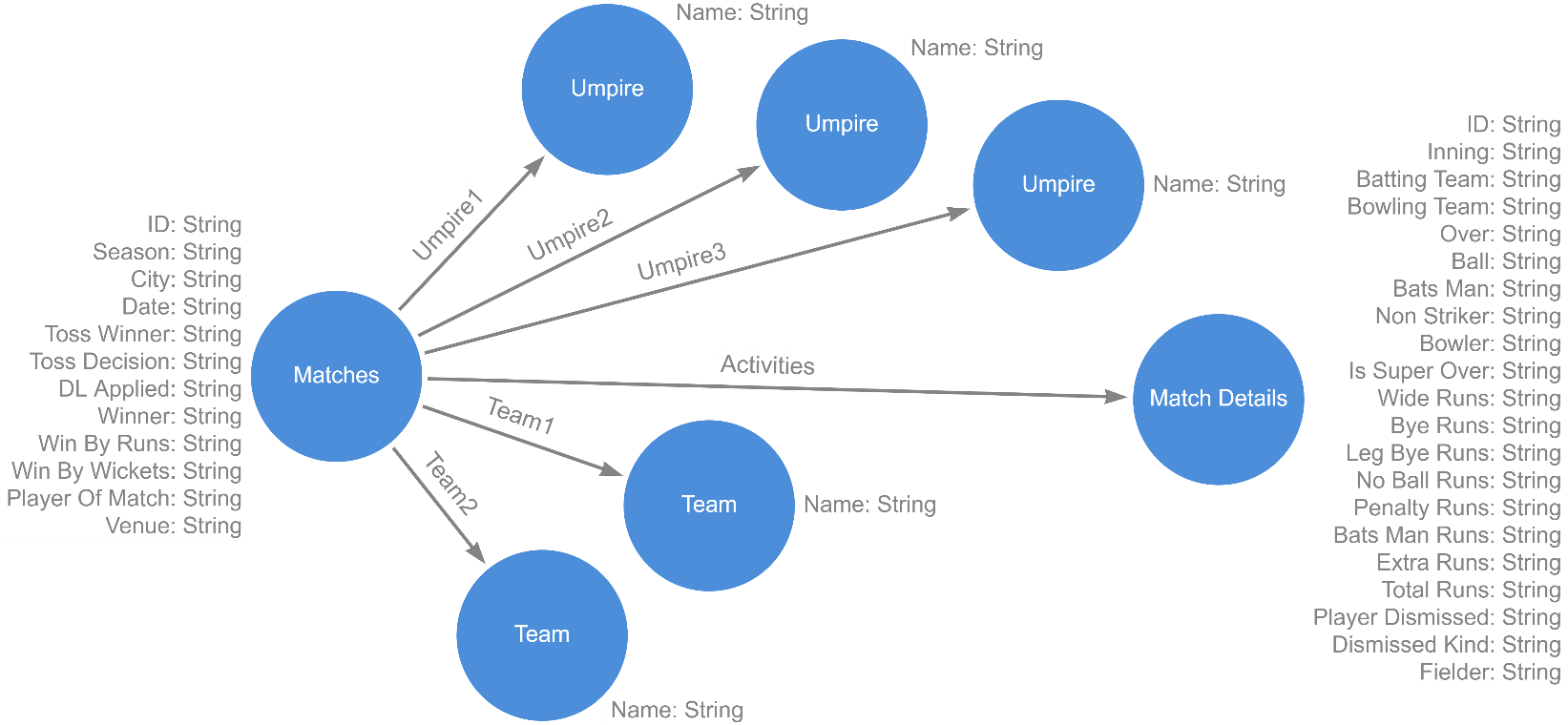


Figure 1: Data Model for IPL (Indian Premier League) from 2008 to 2019.

## **b)**

Nodes and relationships according to the above data model are created which are shown below.

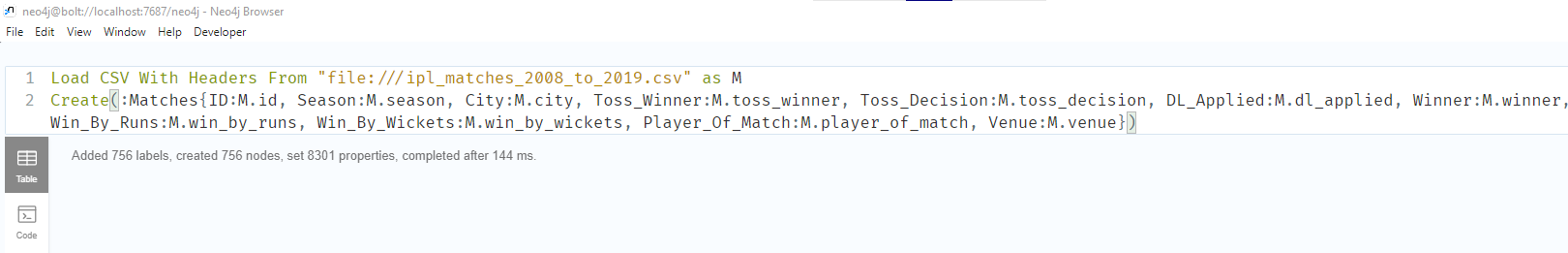


Figure 2: Creating Node "Matches".

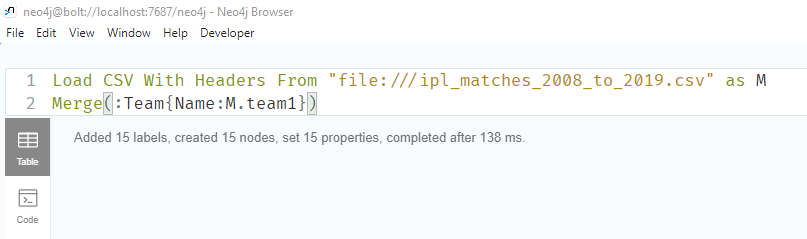


Figure 3: Creating Node "Team".

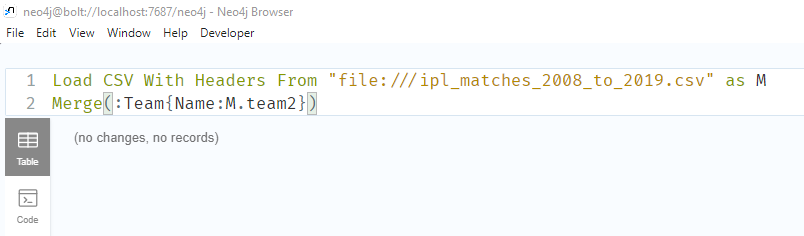


Figure 4:Creating Node "Team".

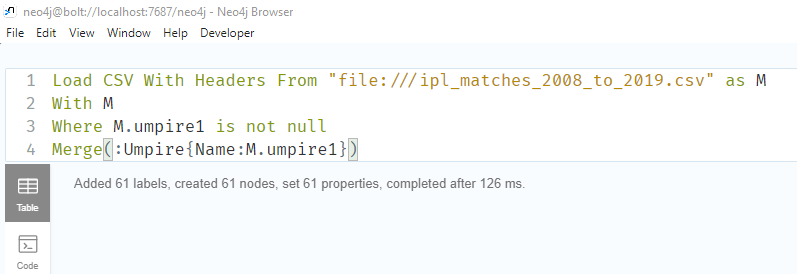


Figure 5: Creating Node "Umpire".

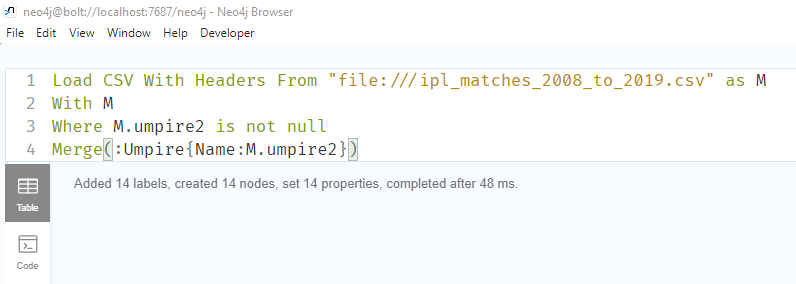


Figure 6: Creating Node "Umpire".

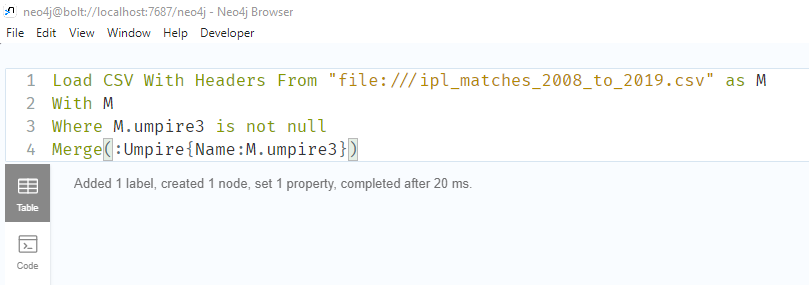


Figure 7: Creating Node "Umpire".

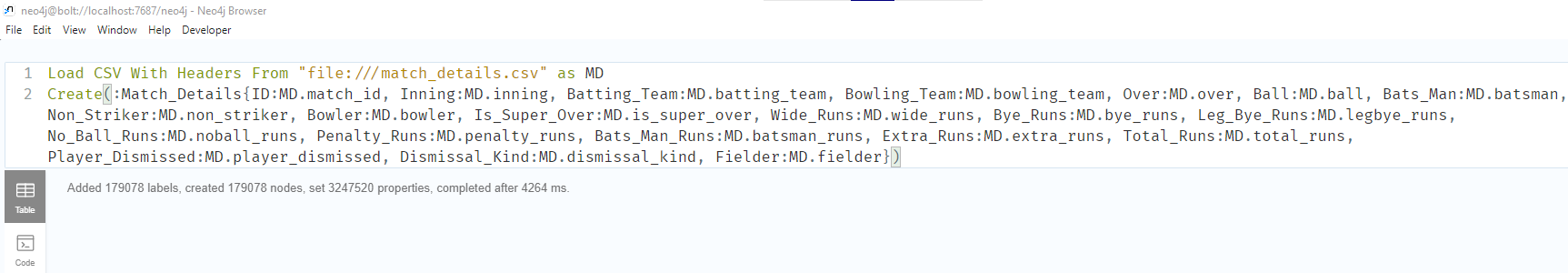


Figure 8: Creating Node "Match\_Details".



Figure 9: Making relationship "Team1” between "Matches" and "Team" according to the given CSV file.



Figure 10: Making relationship "Team2” between "Matches" and "Team" according to the given CSV file.



Figure 11: Making relationship "Umpire1” between "Matches" and "Umpire" according to the given CSV file.

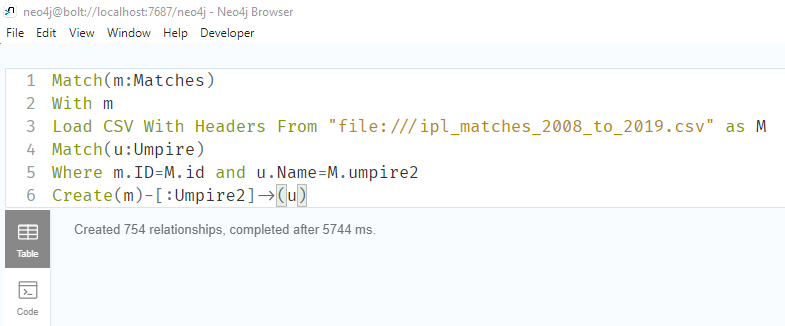


Figure 12: Making relationship "Umpire2” between "Matches" and "Umpire" according to the given CSV file.



Figure 13: Making relationship "Umpire3” between "Matches" and "Umpire" according to the given CSV file.

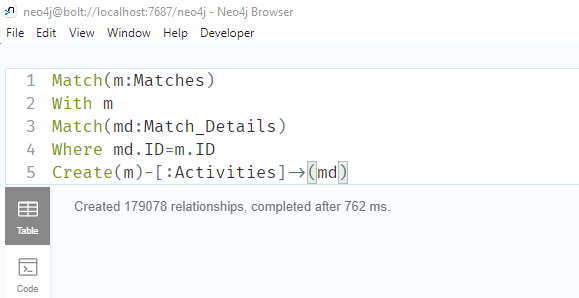


Figure 14: Making relationship "Activities" between "Matches" and "Match\_Details".

## **c)**

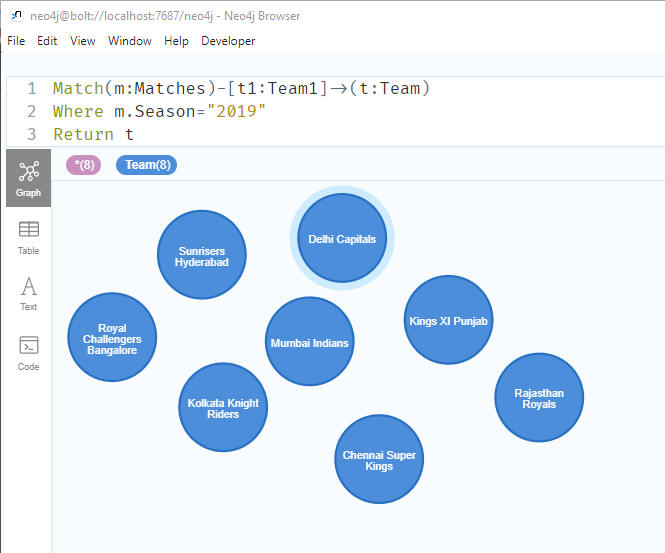


Figure 15: Showing all the teams from season 2019.

## **d)**

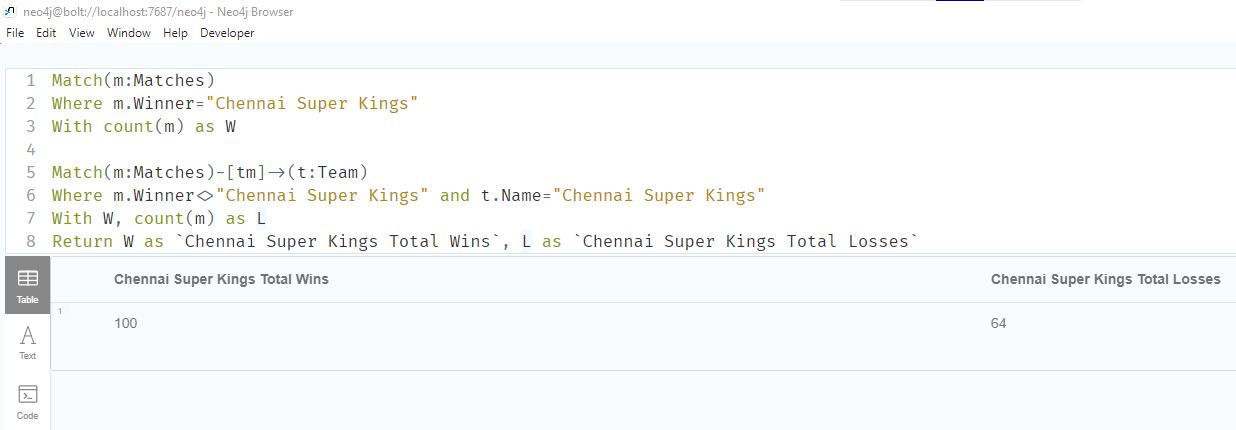


Figure 16: Showing how many matches “Chennai Super kings” won and lost

## **e)**

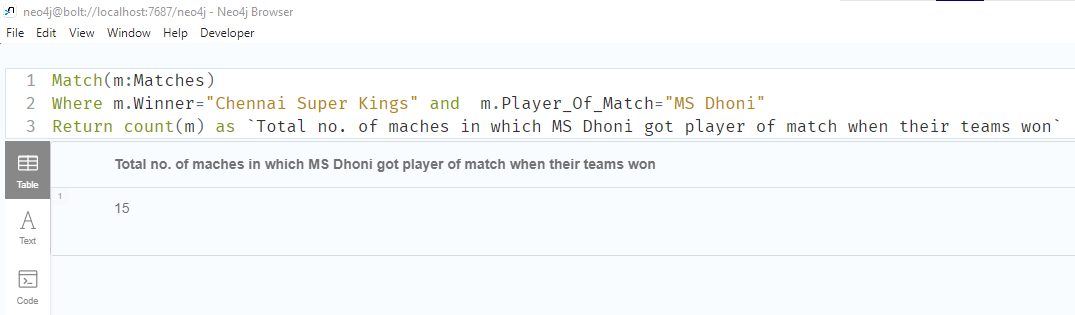


Figure 17: Showing how many times does “MS Dhoni” got the player of the match when their teams won the match.

## **f)**

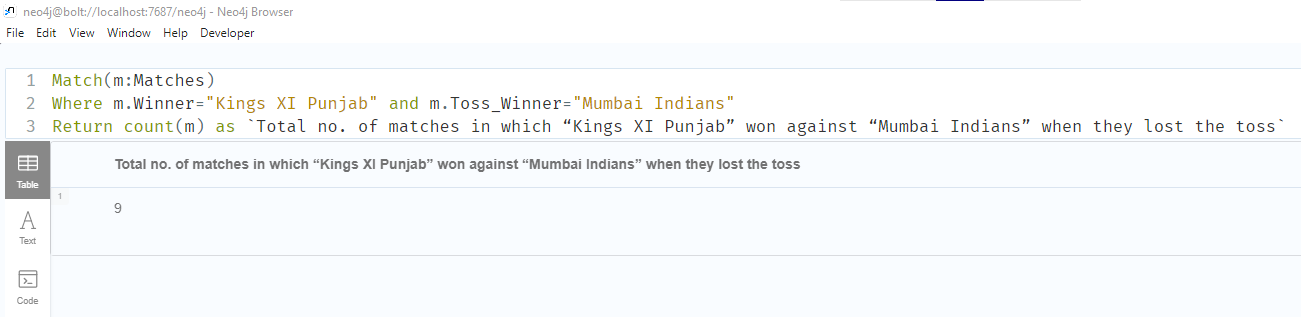


Figure 18: Showing how many matches does “Kings XI Punjab” won against “Mumbai Indians” when they lost the toss.

## **g)**



Figure 19: Showing all the matches in which “Chennai Super kings” won the toss, elected to bat, and won the match.

## **h)**

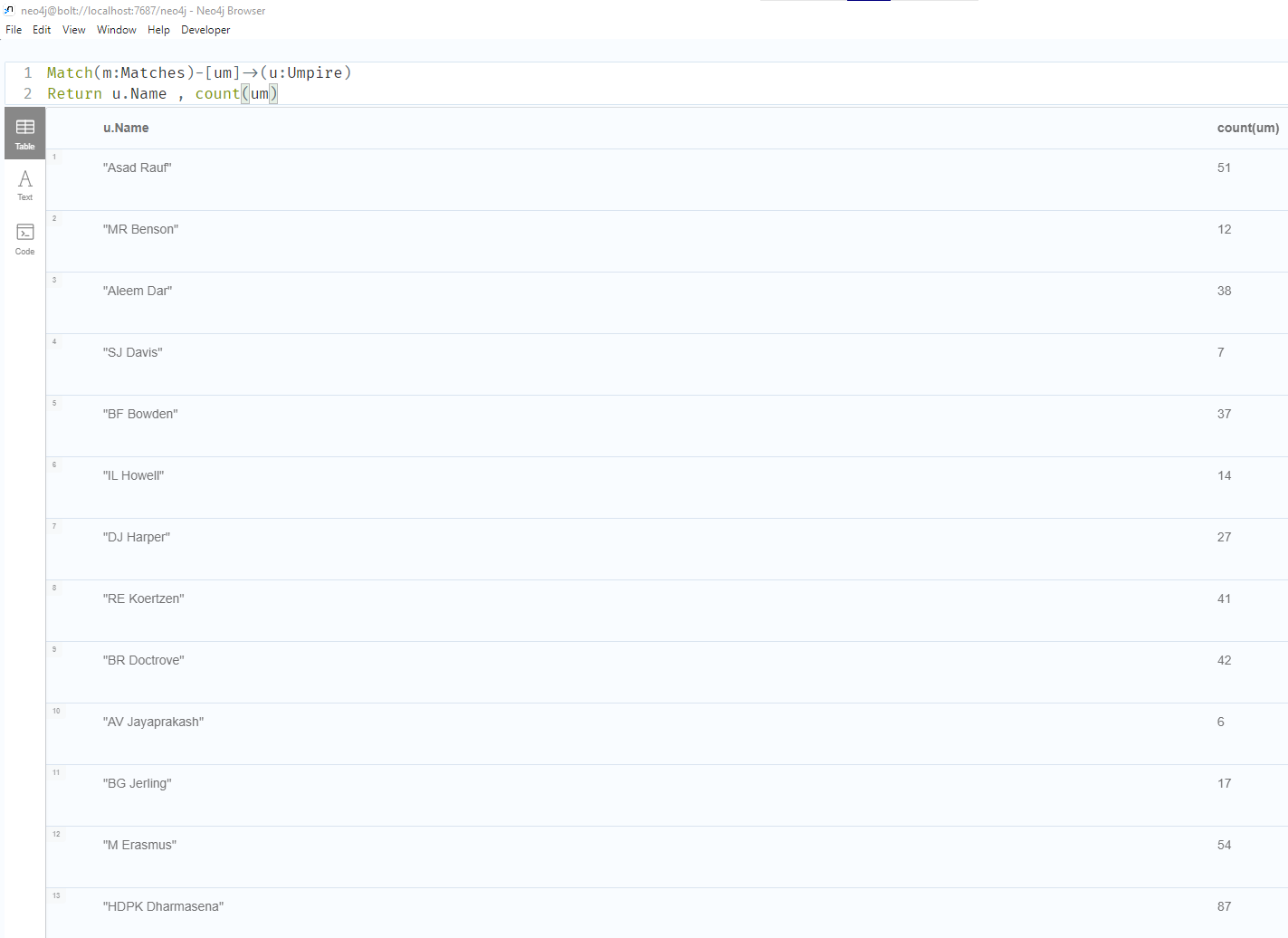


Figure 20: Showing all the umpires and the number of matches they have umpired.

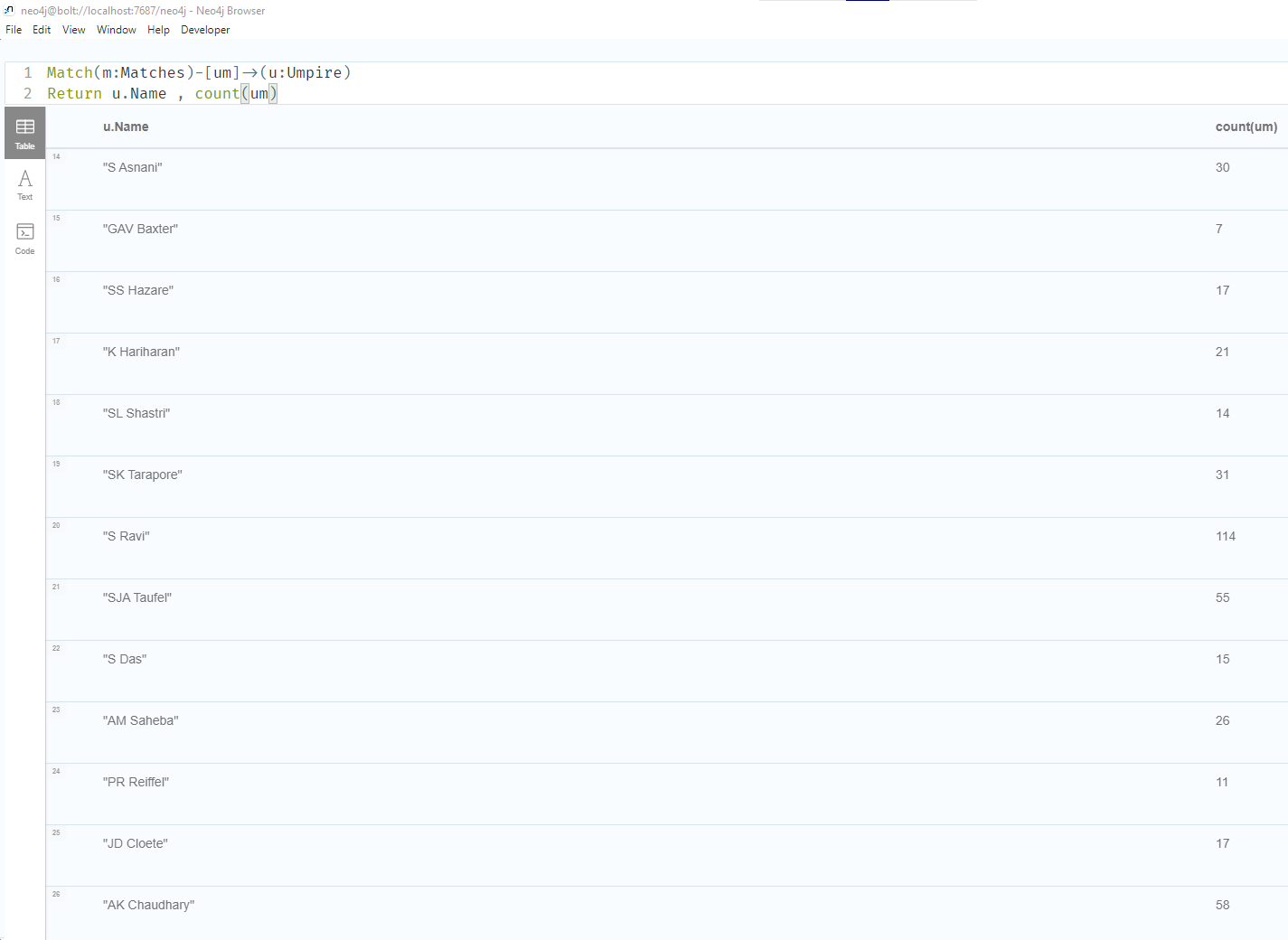


Figure 21: Showing all the umpires and the number of matches they have umpired.

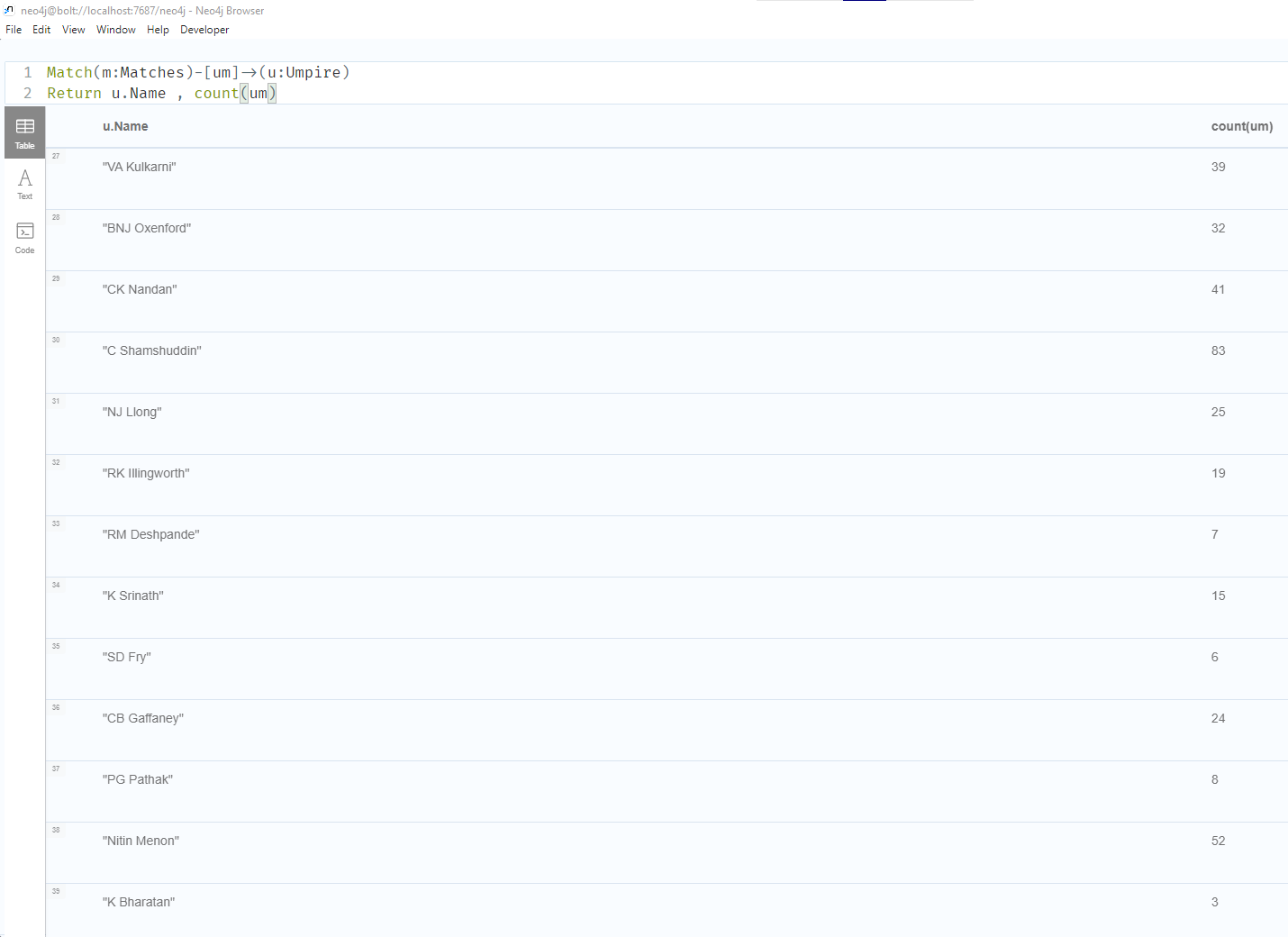


Figure 22: Showing all the umpires and the number of matches they have umpired.

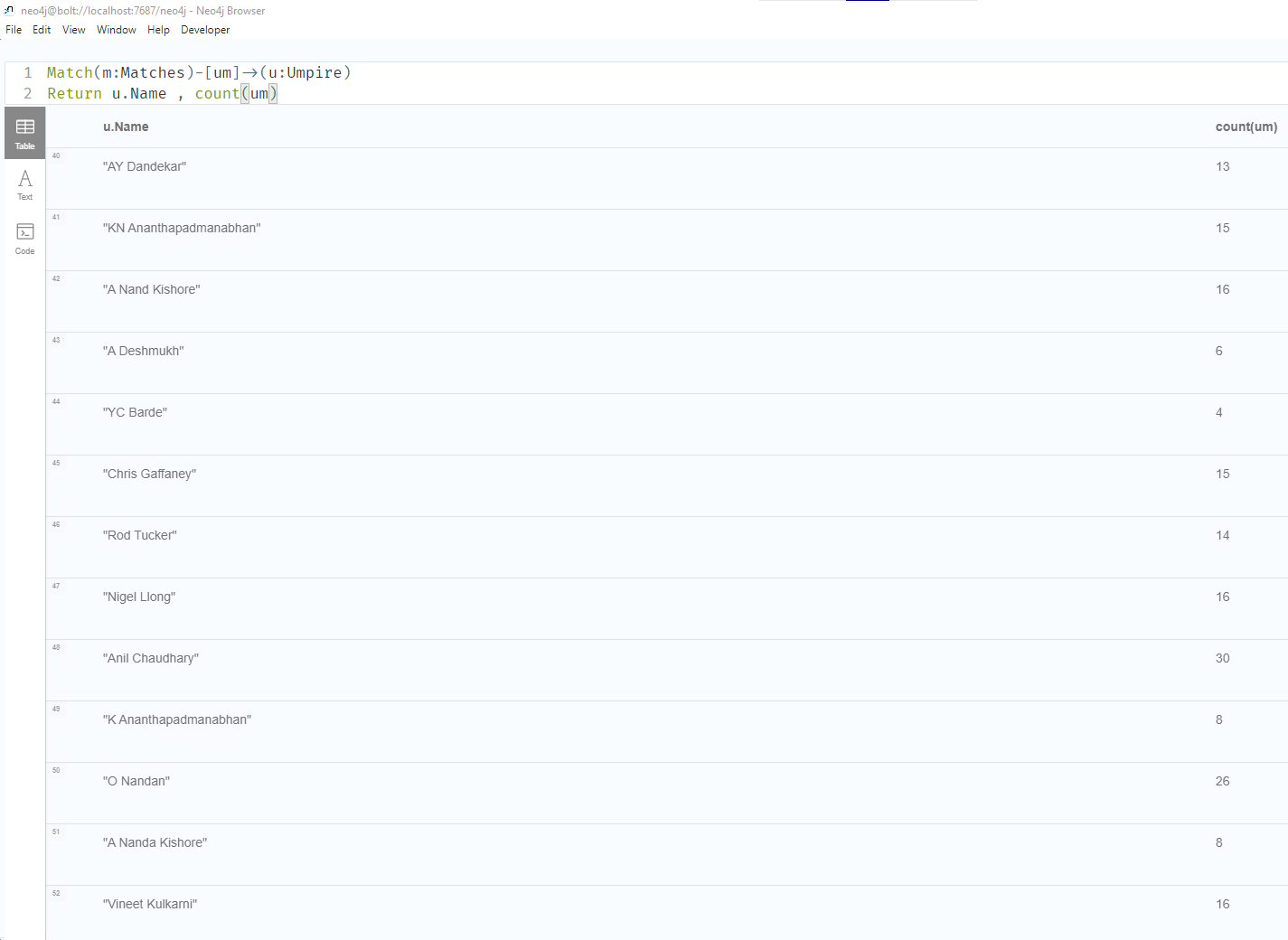


Figure 23: Showing all the umpires and the number of matches they have umpired.

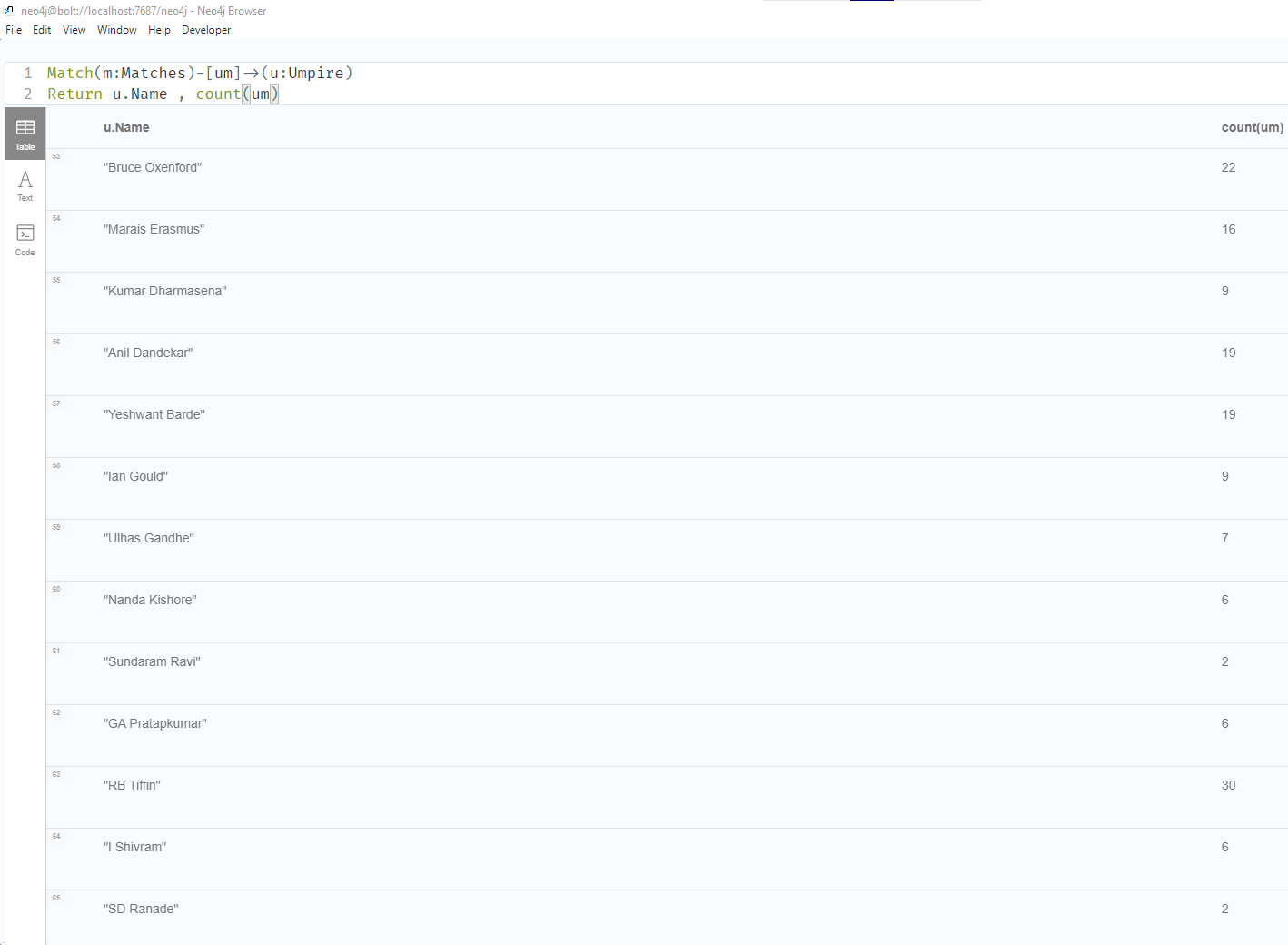


Figure 24: Showing all the umpires and the number of matches they have umpired.

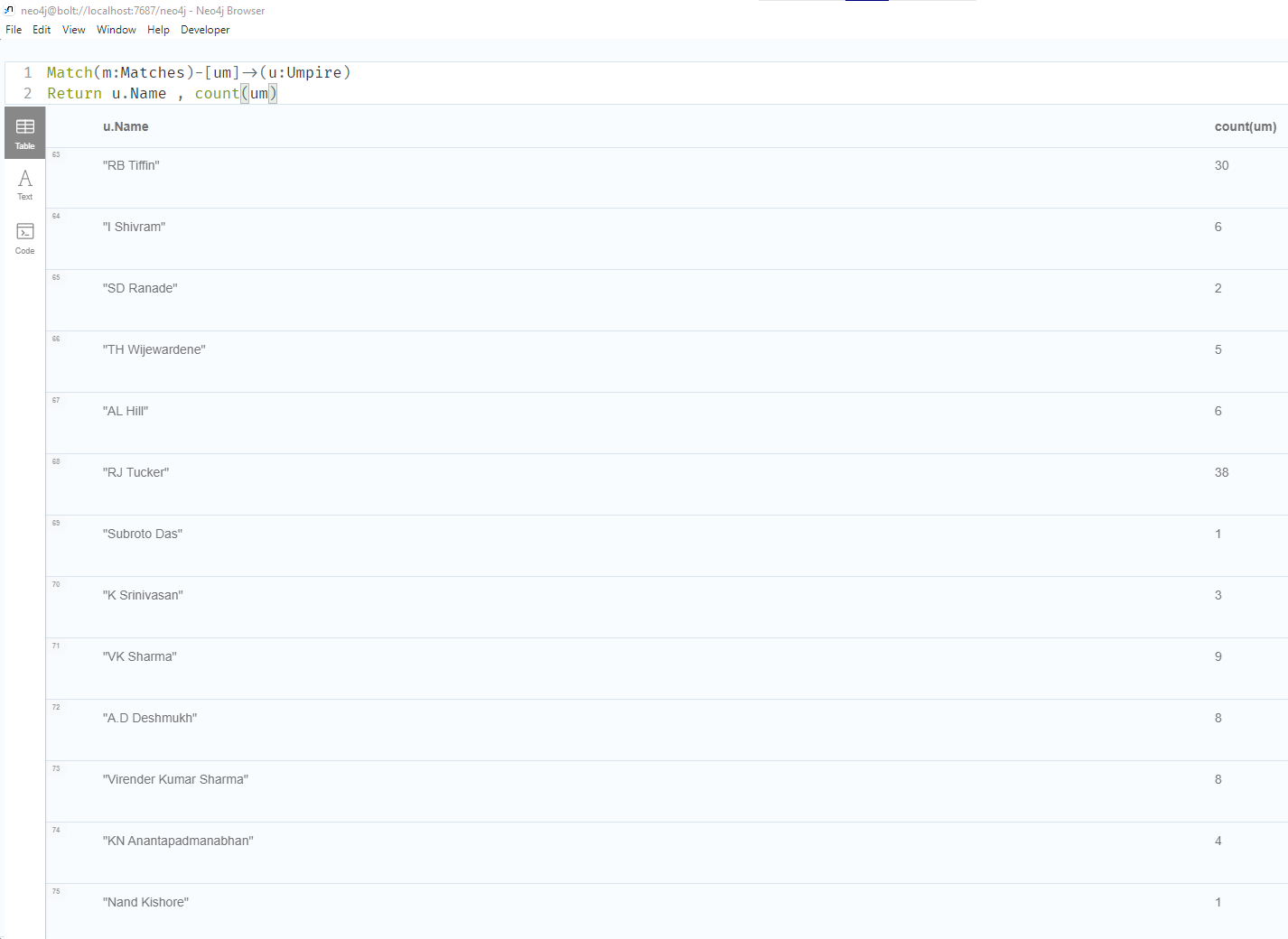


Figure 25: Showing all the umpires and the number of matches they have umpired.

## **i)**



Figure 26: Showing who umpired the most matches.

## **j)**

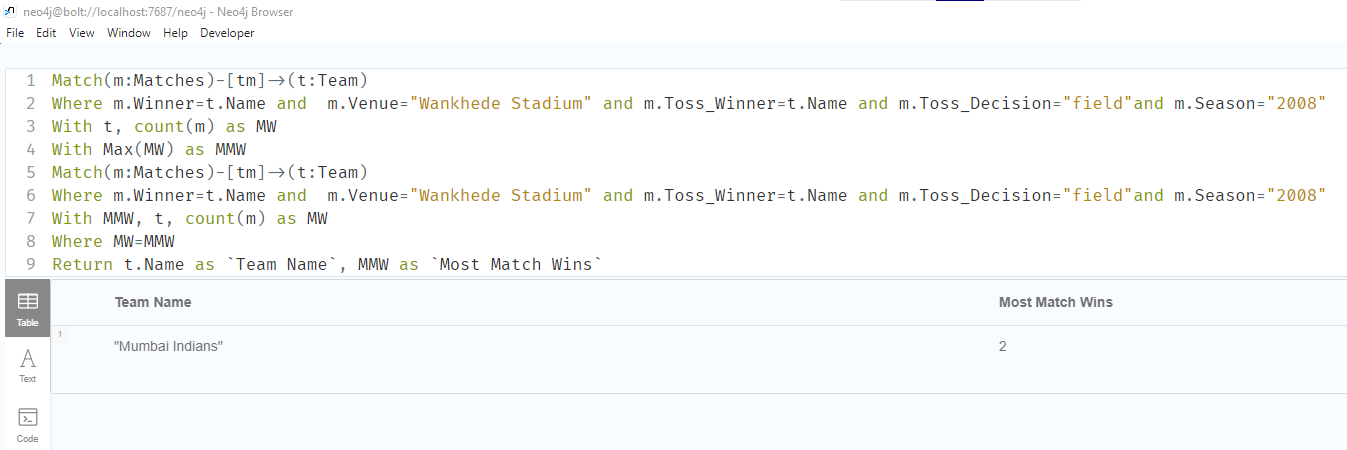


Figure 27: Showing which team won most matches in “Wankhede Stadium” venue when they won the toss and chose to field in the year 2008.

## **k)**

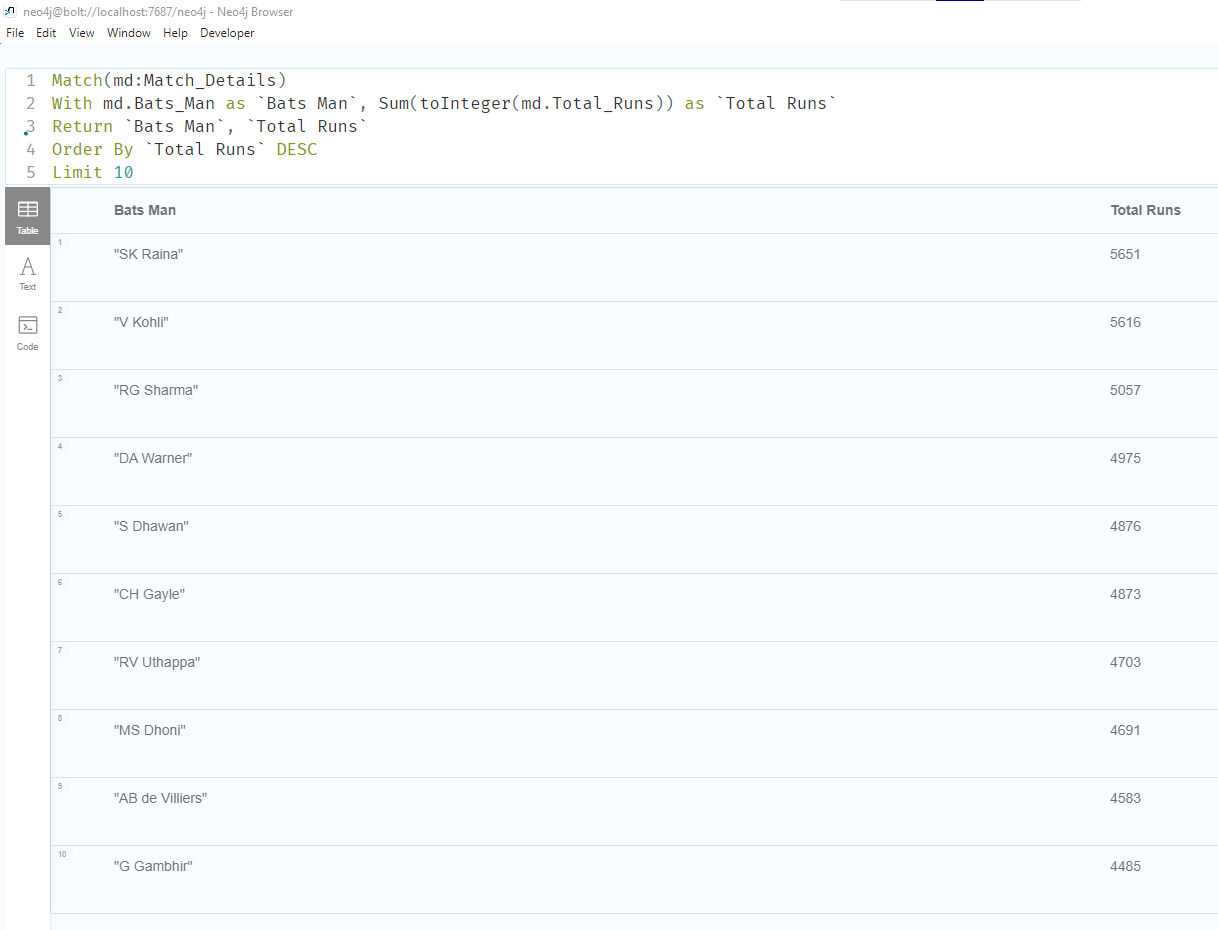


Figure 28: Display top 10 batsmen in IPL season 2008-2019.

## **l)**

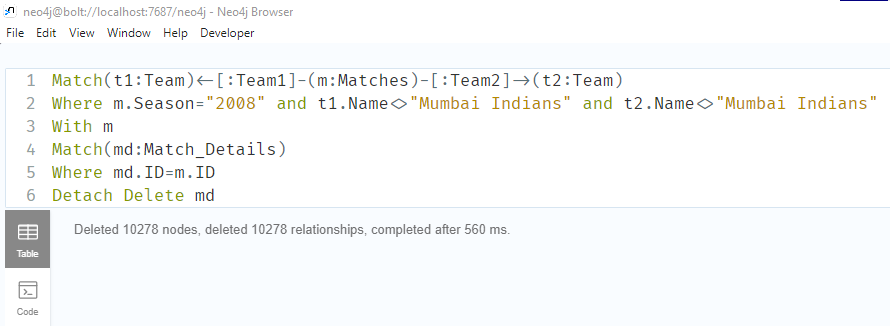


Figure 29: Deleting all the Match Details from season 2008 except the details of the matches played by “Mumbai Indians”.

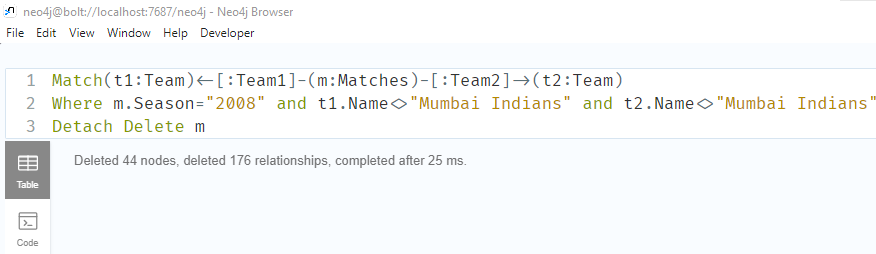


Figure 30: Deleting all the Matches from season 2008 except the matches played by “Mumbai Indians”.

## **m)**

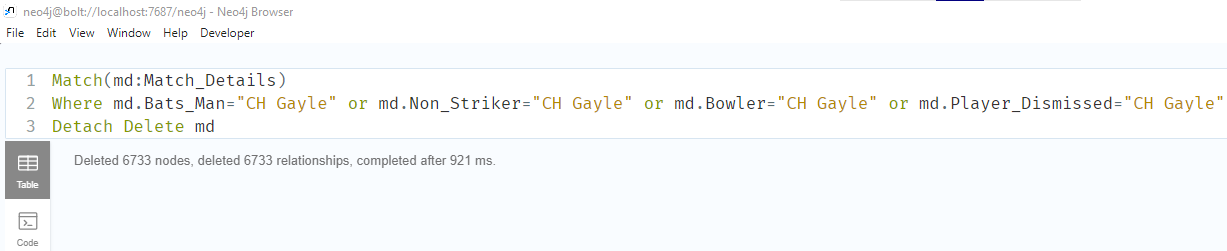


Figure 31: Deleting all the details of CH Gayle from Match Details Node.

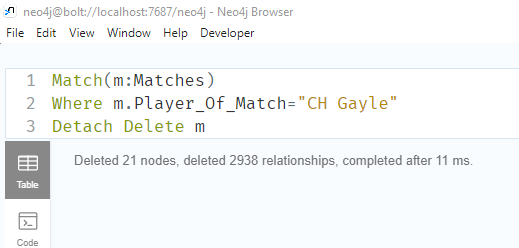


Figure 32: Deleting all the details of CH Gayle from Match Node.