**Data Analysis on IPL Dataset**

* Given Dataset contains Indian Premiere League (IPL)’s below data.
  + **Id** – it denotes the id/identification for each match conducted.
  + **City** – it is the place name where the actual match played. Date – which date/year/month is the IPL played
  + **Player of match** – is the person who is the player of match for the matches conducted.
  + **Venue** – is the stadium at which matches are held.
  + **Teams(team1,team2)** – who are teams playing at each other.
  + Toss winner- is the team who wins the toss. Based on the toss winning, teams can make a decision to choose bat/ball.
  + **Winner** – is the team name who wins the match.
  + **Umpires(umpire1,umpire2**) – makes a decision between the teams who are playing.
  + **Result** – shows whether the team has won by runs or wickets.
  + **Result margin** – shows, by how many runs/wickets does the team has won.
  + **Over, Ball** – Every over contains 6 good balls. There are 20 overs per match.
  + **Bowler, Batsman** – Bowler is the person who bowls to a batsman playing at
* Given dataset has two sheets-IPL match details and Ball by Ball details.

**IPL Match** – has (817, 19) 817-rows and 19 columns.

**Ball By Ball** – has (193469, 18) 1,93,469 rows and 18 columns.

* Total Matches held from the year 2008 to 2020 are 816.
* Total IPL seasons we are using to analyse is 13.
* S Ravi has umpired the most which is 121 times.
* Mumbai Indians team has won the most tosses and Rising Pune Supergiant has won least toss.
* AB is the player who has won most number of times the- player of match. Total 23 times in the year 2008-2020.
* Mumbai Indians team has the highest winning percentage.
* Kings XI Punjab Team has won most times in an eliminator
* Mumbai Indians team has played most and Kochi Tuskers Kerala, Rising Pune Supergiants has played least number of games.

|  |  |  |  |
| --- | --- | --- | --- |
| **Teams** | **Match1** | **Match2** | **Total Matches played** |
| Chennai Super Kings | 94 | 84 | 178 |
| Deccan Chargers | 39 | 36 | 75 |
| Delhi Capitals | 19 | 14 | 33 |
| Delhi Daredevils | 83 | 78 | 161 |
| Gujarat Lions | 16 | 14 | 30 |
| Kings XI Punjab | 92 | 98 | 190 |
| Kochi Tuskers Kerala | 7 | 7 | 14 |
| Kolkata Knight Riders | 95 | 97 | 192 |
| Mumbai Indians | 97 | 106 | 203 |
| Pune Warriors | 23 | 23 | 46 |
| Rajasthan Royals | 70 | 91 | 161 |
| Rising Pune Supergiant | 7 | 9 | 16 |
| Rising Pune Supergiants | 7 | 7 | 14 |
| Royal Challengers Bangalore | 108 | 87 | 195 |
| Sunrisers Hyderabad | 59 | 65 | 124 |

* M Chinnaswamy is the venue where most matches are held. Hence, it is famous venue.
* Team decides to choose bat/field after winning the toss. As per the data, toss winning team chose fielding most of the times.
* As per the data, most of the times toss winning teams did not win all the times. But, there is a slight amount of extra probability that they might win the match.
* As per the data, 496 times chasing team has won the match out of 816 matches.
* Mumbai is the city where most matches held as per the given data.
* Below are the lucky venues for particular matches, as they have won many matched on that venue.

|  |  |  |
| --- | --- | --- |
| **Teams** | **Lucky venue** | **No of matches won** |
| Chennai Super Kings | MA Chidambaram Stadium, Chepauk | 40 |
| Deccan Chargers | Barabati Stadium, Rajiv Gandhi International Stadium, Uppal | 3 |
| Delhi Daredevils | Feroz Shah Kotla | 27 |
| Kings XI Punjab | Punjab Cricket Association Stadium, Mohali | 18 |
| Kolkata Knight Riders | Eden Gardens | 45 |
| Mumbai Indians | Wankhede Stadium | 42 |
| Rajasthan Royals | Sawai Mansingh Stadium | 32 |
| Royal Challengers Bangalore | M Chinnaswamy Stadium | 37 |

* V Kohli has played the most number of balls. i.e, 4609 balls.
* V Kohli is the player who has scored highest runs. i.e, 5878 runs.
* S Dhawan has hit the most number of 4's. i.e, 591.
* CH Gayle has hit the most number of 6's. i.e, 349.
* Below is the count of fours and sixes hit in each season.

|  |  |  |
| --- | --- | --- |
| **Year** | **Count of 4's hit** | **Count of 6's hit** |
| 2008 | 1703 | 623 |
| 2009 | 1317 | 506 |
| 2010 | 1708 | 585 |
| 2011 | 1916 | 639 |
| 2012 | 1911 | 733 |
| 2013 | 2052 | 675 |
| 2014 | 1562 | 714 |
| 2015 | 1607 | 692 |
| 2016 | 1633 | 639 |
| 2017 | 1611 | 705 |
| 2018 | 1652 | 872 |
| 2019 | 1653 | 784 |
| 2020 | 1583 | 735 |

* Below given are the bowlers that have taken most extra runs.

|  |  |
| --- | --- |
| SL Malinga | 293 |
| P Kumar | 236 |
| UT Yadav | 226 |
| DJ Bravo | 210 |
| B Kumar | 201 |
| I Sharma | 196 |