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import pandas as pd

# Load the IPL dataset
df = pd.read_csv('matches.csv')
df.head()

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```

*#Q1: How many matches we've got in the dataset?*

```
total_matches = df.shape[0]
print(f"Total Matches: {total_matches}")
```

Total Matches: 636

*#Q2: How many seasons we've got in the dataset?*

```
total_seasons = df['season'].nunique()
print(f"Total Seasons: {total_seasons}")
```

Total Seasons: 10

*#Q3: Which Team won by maximum runs?*

```
max_run_win = df[df['win_by_runs'] == df['win_by_runs'].max()]
print("Team that won by maximum runs:")
print(max_run_win[['winner', 'win_by_runs']])
```

Team that won by maximum runs:

	winner	win_by_runs
43	Mumbai Indians	146

*#Q4: Which Team won by maximum wickets?*

```
max_wicket_win = df[df['win_by_wickets'] ==
df['win_by_wickets'].max()]
print("Team that won by maximum wickets:")
print(max_wicket_win[['winner', 'win_by_wickets']])
```

Team that won by maximum wickets:

	winner	win_by_wickets
2	Kolkata Knight Riders	10
34	Kings XI Punjab	10
71	Deccan Chargers	10
119	Delhi Daredevils	10
183	Royal Challengers Bangalore	10
298	Rajasthan Royals	10
376	Mumbai Indians	10
390	Chennai Super Kings	10
542	Royal Challengers Bangalore	10
590	Sunrisers Hyderabad	10

*#Q5: Which Team won by closest margin (minimum runs > 0)?*

```
min_run_win = df[(df['win_by_runs'] >
0)].sort_values('win_by_runs').head(1)
print("Team that won by closest margin (min runs):")
print(min_run_win[['winner', 'win_by_runs']])
```

Team that won by closest margin (min runs):

	winner	win_by_runs
163	Kings XI Punjab	1

```
#Q6: Which Team won by minimum wickets > 0?
min_wicket_win = df[(df['win_by_wickets'] >
0)].sort_values('win_by_wickets').head(1)
print("Team that won by minimum wickets:")
print(min_wicket_win[['winner', 'win_by_wickets']])
```

```
Team that won by minimum wickets:
              winner  win_by_wickets
559  Kolkata Knight Riders           1
```

```
#Q7: Which season had the most number of matches?
season_match_count = df['season'].value_counts().reset_index()
season_match_count.columns = ['season', 'match_count']
most_matches_season = season_match_count.iloc[0]
print("Season with most matches:")
print(most_matches_season)
```

```
Season with most matches:
season      2013
match_count    76
Name: 0, dtype: int64
```

```
# Q8: Which IPL team is more successful? (Most Wins)
most_successful_team = df['winner'].value_counts().reset_index()
most_successful_team.columns = ['team', 'wins']
print("Most successful IPL Team:")
print(most_successful_team.head(1))
```

```
Most successful IPL Team:
              team  wins
0  Mumbai Indians    92
```