

```

0      Kolkata Knight Riders
1      Chennai Super Kings
2      Rajasthan Royals
3      Mumbai Indians
4      Deccan Chargers
...
572     Delhi Daredevils
573     Gujarat Lions
574     Sunrisers Hyderabad
575     Gujarat Lions
576     Sunrisers Hyderabad
Name: team1, Length: 577, dtype: object    Royal Challengers Bangalore
1      Kings XI Punjab
2      Delhi Daredevils
3      Royal Challengers Bangalore
4      Kolkata Knight Riders
...
572     Royal Challengers Bangalore
573     Royal Challengers Bangalore
574     Kolkata Knight Riders
575     Sunrisers Hyderabad
576     Royal Challengers Bangalore
Name: team2, Length: 577, dtype: object

```

```

df['team1']=df['team1'].str.lower().str.strip() #.str.lower() to convert into lower case and space is removed
df['team2']=df['team2'].str.lower().str.lower()
print(df['team1'], df['team2'])

```

```

0      kolkata knight riders
1      chennai super kings
2      rajasthan royals
3      mumbai indians
4      deccan chargers
...
572     delhi daredevils
573     gujarat lions
574     sunrisers hyderabad
575     gujarat lions
576     sunrisers hyderabad
Name: team1, Length: 577, dtype: object    royal challengers bangalore
1      kings xi punjab
2      delhi daredevils
3      royal challengers bangalore
4      kolkata knight riders
...
572     royal challengers bangalore
573     royal challengers bangalore
574     kolkata knight riders
575     sunrisers hyderabad
576     royal challengers bangalore
Name: team2, Length: 577, dtype: object

```

```

print(df['team1'].unique())
print(df['team2'].unique())

```

```

['kolkata knight riders' 'chennai super kings' 'rajasthan royals'
 'mumbai indians' 'deccan chargers' 'kings xi punjab'
 'royal challengers bangalore' 'delhi daredevils' 'kochi tuskers kerala'
 'pune warriors' 'sunrisers hyderabad' 'rising pune supergiants'
 'gujarat lions']
['royal challengers bangalore' 'kings xi punjab' 'delhi daredevils'
 'kolkata knight riders' 'rajasthan royals' 'mumbai indians'
 'chennai super kings' 'deccan chargers' 'pune warriors'
 'kochi tuskers kerala' 'sunrisers hyderabad' 'rising pune supergiants'
 'gujarat lions']

```

## 2.City Name Standardization

Standardize the city column by:

- 1)Replacing missing city names with "Unknown"
- 2)Converting all city names to title case
- 3)Counting matches played in each city

```
print(df['city'].isnull().sum())
```

```
7
```

```
df['city'].fillna('Unknown', inplace=True)
```