Project Cristiano Ronaldo VS Lionel Messi

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```python
In [1]:  import pandas as pd
         import seaborn as sns
         import matplotlib.pyplot as plt
```

```python
In [2]:  player=pd.read_csv('data.csv')
         player
```

Out[2]:

	Player	Season	Competition	Matchday	Date	Venue	Club	Opponent	Result	Playing_Position	M
0	Cristiano Ronaldo	02/03	Liga Portugal	6	2002-10-07	H	Sporting CP	Moreirense FC	3:00	LW	
1	Cristiano Ronaldo	02/03	Liga Portugal	6	2002-10-07	H	Sporting CP	Moreirense FC	3:00	LW	
2	Cristiano Ronaldo	02/03	Liga Portugal	8	2002-10-26	A	Sporting CP	Boavista FC	1:02	NaN	
3	Cristiano Ronaldo	02/03	Taca de Portugal Placard	Fourth Round	2002-11-24	H	Sporting CP	CD Estarreja	4:01	NaN	
4	Cristiano Ronaldo	02/03	Taca de Portugal Placard	Fifth Round	2002-12-18	H	Sporting CP	FC Oliveira do Hospital	8:01	NaN	
...	...	...	...	...	...	...	...	...	...	...	...
1408	Cristiano Ronaldo	22/23	Saudi Pro League	18	2023-02-25	A	Al-Nassr FC	Damac FC	0:3	CF	
1409	Cristiano Ronaldo	22/23	Saudi Pro League	18	2023-02-25	A	Al-Nassr FC	Damac FC	0:3	CF	
1410	Lionel Messi	22/23	Ligue 1	25	2023-02-26	A	Paris Saint-Germain	Olympique Marseille	0:3	CF	
1411	Lionel Messi	22/23	Ligue 1	26	2023-03-04	H	Paris Saint-Germain	FC Nantes	4:2	CF	
1412	Cristiano Ronaldo	22/23	Saudi Pro League	21	2023-03-18	H	Al-Nassr FC	Abha Club	2:1	CF	

1413 rows × 14 columns

```python
In [3]:  player=player.rename(columns={'Type':'Goal_Type'})
         player
```

Out[3]:

	Player	Season	Competition	Matchday	Date	Venue	Club	Opponent	Result	Playing_Position	M
0	Cristiano Ronaldo	02/03	Liga Portugal	6	2002-10-07	H	Sporting CP	Moreirense FC	3:00	LW	
1	Cristiano Ronaldo	02/03	Liga Portugal	6	2002-10-07	H	Sporting CP	Moreirense FC	3:00	LW	
2	Cristiano Ronaldo	02/03	Liga Portugal	8	2002-10-26	A	Sporting CP	Boavista FC	1:02	NaN	
3	Cristiano Ronaldo	02/03	Taca de Portugal Placard	Fourth Round	2002-11-24	H	Sporting CP	CD Estarreja	4:01	NaN	
4	Cristiano Ronaldo	02/03	Taca de Portugal Placard	Fifth Round	2002-12-18	H	Sporting CP	FC Oliveira do Hospital	8:01	NaN	
...	...	...	...	...	...	...	...	...	...	...	
1408	Cristiano Ronaldo	22/23	Saudi Pro League	18	2023-02-25	A	Al-Nassr FC	Damac FC	0:3	CF	
1409	Cristiano Ronaldo	22/23	Saudi Pro League	18	2023-02-25	A	Al-Nassr FC	Damac FC	0:3	CF	
1410	Lionel Messi	22/23	Ligue 1	25	2023-02-26	A	Paris Saint-Germain	Olympique Marseille	0:3	CF	
1411	Lionel Messi	22/23	Ligue 1	26	2023-03-04	H	Paris Saint-Germain	FC Nantes	4:2	CF	
1412	Cristiano Ronaldo	22/23	Saudi Pro League	21	2023-03-18	H	Al-Nassr FC	Abha Club	2:1	CF	

1413 rows × 14 columns

In [82]: `player.columns`

Out[82]:
```
Index(['Player', 'Season', 'Competition', 'Matchday', 'Date', 'Venue', 'Club',
       'Opponent', 'Result', 'Playing_Position', 'Minute', 'At_score',
       'Goal_Type', 'Goal_assist'],
      dtype='object')
```

In [83]: `player.shape`

Out[83]: `(1413, 14)`

In [96]: `#the file has 14 column and 1413 rows`

In [84]: `player.head()`

`Out[84]:`

	Player	Season	Competition	Matchday	Date	Venue	Club	Opponent	Result	Playing_Position	Minut
0	Cristiano Ronaldo	02/03	Liga Portugal	6	2002-10-07	H	Sporting CP	Moreirense FC	3:00	LW	3
1	Cristiano Ronaldo	02/03	Liga Portugal	6	2002-10-07	H	Sporting CP	Moreirense FC	3:00	LW	90+
2	Cristiano Ronaldo	02/03	Liga Portugal	8	2002-10-26	A	Sporting CP	Boavista FC	1:02	NaN	8
3	Cristiano Ronaldo	02/03	Taca de Portugal Placard	Fourth Round	2002-11-24	H	Sporting CP	CD Estarreja	4:01	NaN	6
4	Cristiano Ronaldo	02/03	Taca de Portugal Placard	Fifth Round	2002-12-18	H	Sporting CP	FC Oliveira do Hospital	8:01	NaN	1

`In [85]:` `player.tail()`

`Out[85]:`

	Player	Season	Competition	Matchday	Date	Venue	Club	Opponent	Result	Playing_Position	Mi
1408	Cristiano Ronaldo	22/23	Saudi Pro League	18	2023-02-25	A	Al-Nassr FC	Damac FC	0:3	CF	
1409	Cristiano Ronaldo	22/23	Saudi Pro League	18	2023-02-25	A	Al-Nassr FC	Damac FC	0:3	CF	
1410	Lionel Messi	22/23	Ligue 1	25	2023-02-26	A	Paris Saint-Germain	Olympique Marseille	0:3	CF	
1411	Lionel Messi	22/23	Ligue 1	26	2023-03-04	H	Paris Saint-Germain	FC Nantes	4:2	CF	
1412	Cristiano Ronaldo	22/23	Saudi Pro League	21	2023-03-18	H	Al-Nassr FC	Abha Club	2:1	CF	

`In [86]:` `player.info`

```
Out[86]: <bound method DataFrame.info of                        Player Season                Competition  Matchday  \
         0      Cristiano Ronaldo  02/03            Liga Portugal         6
         1      Cristiano Ronaldo  02/03            Liga Portugal         6
         2      Cristiano Ronaldo  02/03            Liga Portugal         8
         3      Cristiano Ronaldo  02/03  Taca de Portugal Placard  Fourth Round
         4      Cristiano Ronaldo  02/03  Taca de Portugal Placard   Fifth Round
         ...                  ...    ...                       ...           ...
         1408   Cristiano Ronaldo  22/23          Saudi Pro League        18
         1409   Cristiano Ronaldo  22/23          Saudi Pro League        18
         1410       Lionel Messi   22/23                   Ligue 1        25
         1411       Lionel Messi   22/23                   Ligue 1        26
         1412   Cristiano Ronaldo  22/23          Saudi Pro League        21

                       Date Venue                Club              Opponent Result  \
         0      2002-10-07     H          Sporting CP          Moreirense FC   3:00
         1      2002-10-07     H          Sporting CP          Moreirense FC   3:00
         2      2002-10-26     A          Sporting CP            Boavista FC   1:02
         3      2002-11-24     H          Sporting CP            CD Estarreja   4:01
         4      2002-12-18     H          Sporting CP  FC Oliveira do Hospital   8:01
         ...           ...   ...                 ...                    ...    ...
         1408   2023-02-25     A          Al-Nassr FC              Damac FC   0:3
         1409   2023-02-25     A          Al-Nassr FC              Damac FC   0:3
         1410   2023-02-26     A  Paris Saint-Germain    Olympique Marseille   0:3
         1411   2023-03-04     H  Paris Saint-Germain             FC Nantes   4:2
         1412   2023-03-18     H          Al-Nassr FC              Abha Club   2:1

                Playing_Position Minute At_score          Goal_Type        Goal_assist
         0                    LW     34     2:00           Solo run                NaN
         1                    LW   90+5     3:00             Header          Rui Jorge
         2                   NaN     88     1:02   Right-footed shot     Carlos Martins
         3                   NaN     67     3:00    Left-footed shot       Cesar Prates
         4                   NaN     13     3:00                NaN                NaN
         ...                 ...    ...      ...                ...                ...
         1408                 CF     44      0:3  Counter attack goal       Ayman Yahya
         1409                 CF     23      0:2    Left-footed shot  Sultan Al-Ghannam
         1410                 CF     29      0:2   Right-footed shot      Kylian Mbappé
         1411                 CF     12      1:0    Left-footed shot                NaN
         1412                 CF     78      1:1    Direct free kick                NaN

         [1413 rows x 14 columns]>
```

In [87]: `player.describe()`

Out[87]:

	Player	Season	Competition	Matchday	Date	Venue	Club	Opponent	Result	Playing_Position
count	1413	1413	1413	1413	1413	1413	1413	1413	1413	1355
unique	2	22	21	53	821	2	7	173	71	10
top	Cristiano Ronaldo	14/15	LaLiga	Group Stage	2013-01-27	H	FC Barcelona	Sevilla FC	3:00	CF
freq	710	119	785	155	7	823	672	65	92	485

In [88]: `player.isnull().sum()`

```
Out[88]:    Player              0
            Season              0
            Competition         0
            Matchday            0
            Date                0
            Venue               0
            Club                0
            Opponent            0
            Result              0
            Playing_Position   58
            Minute              0
            At_score            0
            Goal_Type          16
            Goal_assist       460
            dtype: int64
```

In [89]:   ```python
            #in three columns i have a empty cells now i need a entry values him .....
            ```

In [93]:    ```python
            player.fillna(0, inplace =True)
            ```

In [94]:   ```python
            player.isnull().sum()
            ```

```
Out[94]:    Player             0
            Season             0
            Competition        0
            Matchday           0
            Date               0
            Venue              0
            Club               0
            Opponent           0
            Result             0
            Playing_Position   0
            Minute             0
            At_score           0
            Goal_Type          0
            Goal_assist        0
            dtype: int64
```

In [92]:   ```python
            #Now , no empty cell
            ```

In [38]:   ```python
            player.duplicated().any()
            ```

Out[38]:    True

In [103…    ```python
            player['Player'].nunique()
            ```

Out[103]:   2

In [107…   ```python
            #the are 2 player
            ```

In [97]:    ```python
            player['Player'].value_counts()
            ```

```
Out[97]:    Cristiano Ronaldo    710
            Lionel Messi         703
            Name: Player, dtype: int64
```

In [110…   ```python
            player['Goal_Type'].value_counts()
            ```

```
Out[110]:  Left-footed shot           549
           Right-footed shot          338
           Penalty                    216
           Header                     136
           Direct free kick           101
           Tap-in                      23
           0                           16
           Long distance kick          10
           Counter attack goal          7
           Solo run                     6
           Penalty rebound              6
           Deflected shot on goal       4
           Chest                        1
           Name: Goal_Type, dtype: int64
```

```python
In [159…  if 'Goal_Type' in player.columns:
              plt.figure(figsize=(10, 6))

              sns.histplot(x='Goal_Type', data=player, kde=True)

              plt.xticks(rotation=45)

              plt.show()
          else:
              print("The column 'Goal_Type' does not exist in the DataFrame.")
```
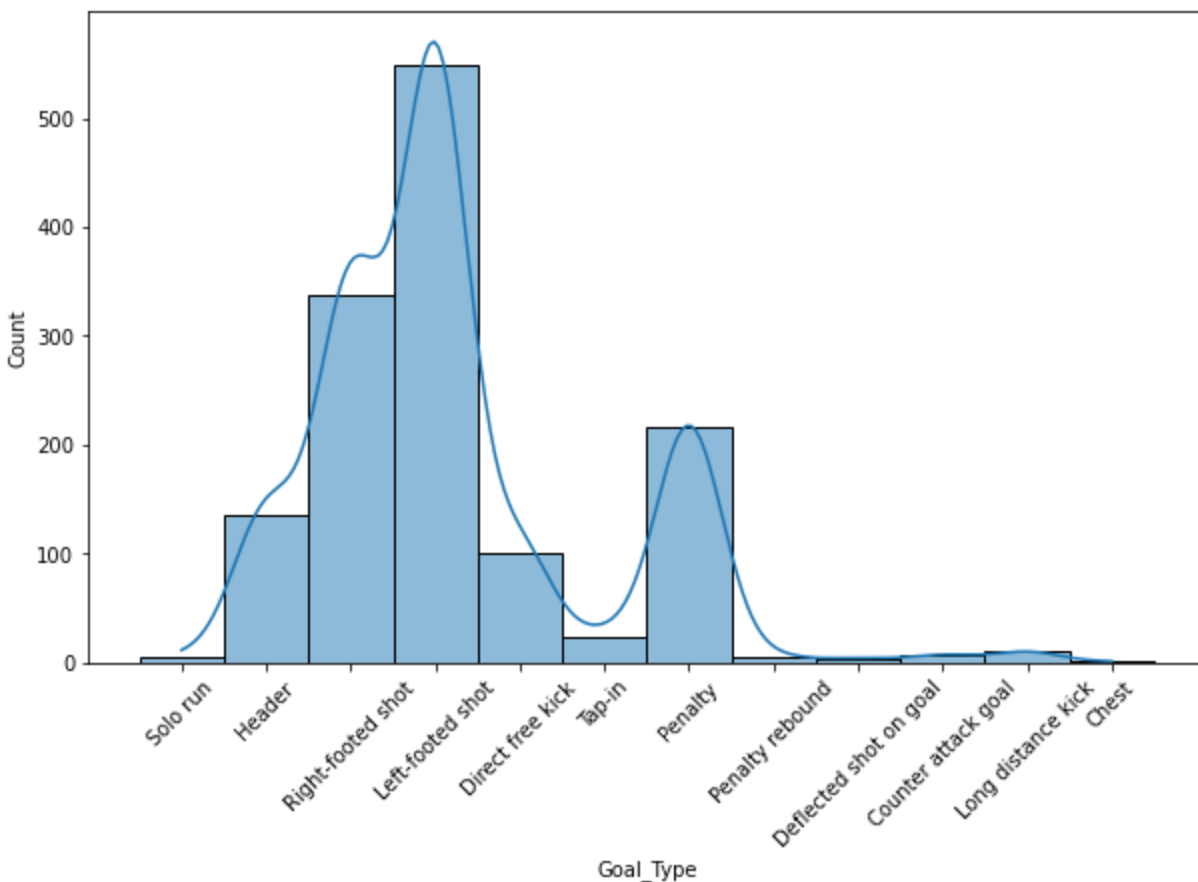


```python
In [160…  #Most players scored goals with the left foot
```

```python
In [108…  player[player['Player']=='Cristiano Ronaldo']
```

Out[108]:

	Player	Season	Competition	Matchday	Date	Venue	Club	Opponent	Result	Playing_Position	
0	Cristiano Ronaldo	02/03	Liga Portugal	6	2002-10-07	H	Sporting CP	Moreirense FC	3:00	LW	
1	Cristiano Ronaldo	02/03	Liga Portugal	6	2002-10-07	H	Sporting CP	Moreirense FC	3:00	LW	
2	Cristiano Ronaldo	02/03	Liga Portugal	8	2002-10-26	A	Sporting CP	Boavista FC	1:02	0	
3	Cristiano Ronaldo	02/03	Taca de Portugal Placard	Fourth Round	2002-11-24	H	Sporting CP	CD Estarreja	4:01	0	
4	Cristiano Ronaldo	02/03	Taca de Portugal Placard	Fifth Round	2002-12-18	H	Sporting CP	FC Oliveira do Hospital	8:01	0	
...	...	...	...	...	...	...	...	...	...	...	...
1405	Cristiano Ronaldo	22/23	Saudi Pro League	16	2023-02-09	A	Al-Nassr FC	Al-Wehda FC	0:4	CF	
1407	Cristiano Ronaldo	22/23	Saudi Pro League	18	2023-02-25	A	Al-Nassr FC	Damac FC	0:3	CF	
1408	Cristiano Ronaldo	22/23	Saudi Pro League	18	2023-02-25	A	Al-Nassr FC	Damac FC	0:3	CF	
1409	Cristiano Ronaldo	22/23	Saudi Pro League	18	2023-02-25	A	Al-Nassr FC	Damac FC	0:3	CF	
1412	Cristiano Ronaldo	22/23	Saudi Pro League	21	2023-03-18	H	Al-Nassr FC	Abha Club	2:1	CF	

710 rows × 14 columns

In [60]:
```python
# The file has been divided into two parts (1.Cristiano Ronaldo) , (2.Lionel Messi)
```

In [61]:
```python
player[player['Player']=='Lionel Messi']
```

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Out[61]:

	Player	Season	Competition	Matchday	Date	Venue	Club	Opponent	Result	Playing_Position
20	Lionel Messi	04/05	LaLiga	34	2005-05-01	H	FC Barcelona	Albacete Balompie	2:00	CF
23	Lionel Messi	05/06	UEFA Champions League	Group Stage	2005-11-02	H	FC Barcelona	Panathinaikos Athens	5:00	RW
24	Lionel Messi	05/06	LaLiga	13	2005-11-27	H	FC Barcelona	Racing Santander	4:01	RW
28	Lionel Messi	05/06	LaLiga	19	2006-01-15	H	FC Barcelona	Athletic Bilbao	2:01	RW
29	Lionel Messi	05/06	LaLiga	20	2006-01-22	H	FC Barcelona	Deportivo Alaves	2:00	CF
...	...	...	...	...	...	...	...	...	...	...
1399	Lionel Messi	22/23	Ligue 1	21	2023-02-01	A	Paris Saint-Germain	Montpellier HSC	1:3	SS
1401	Lionel Messi	22/23	Ligue 1	22	2023-02-04	H	Paris Saint-Germain	FC Toulouse	2:1	SS
1406	Lionel Messi	22/23	Ligue 1	24	2023-02-19	H	Paris Saint-Germain	LOSC Lille	4:3	CF
1410	Lionel Messi	22/23	Ligue 1	25	2023-02-26	A	Paris Saint-Germain	Olympique Marseille	0:3	CF
1411	Lionel Messi	22/23	Ligue 1	26	2023-03-04	H	Paris Saint-Germain	FC Nantes	4:2	CF

703 rows × 14 columns

In [147…
```python
player[player['Goal_Type']=='Header'].groupby('Player').count()['Club']
```

Out[147]:
```
Player
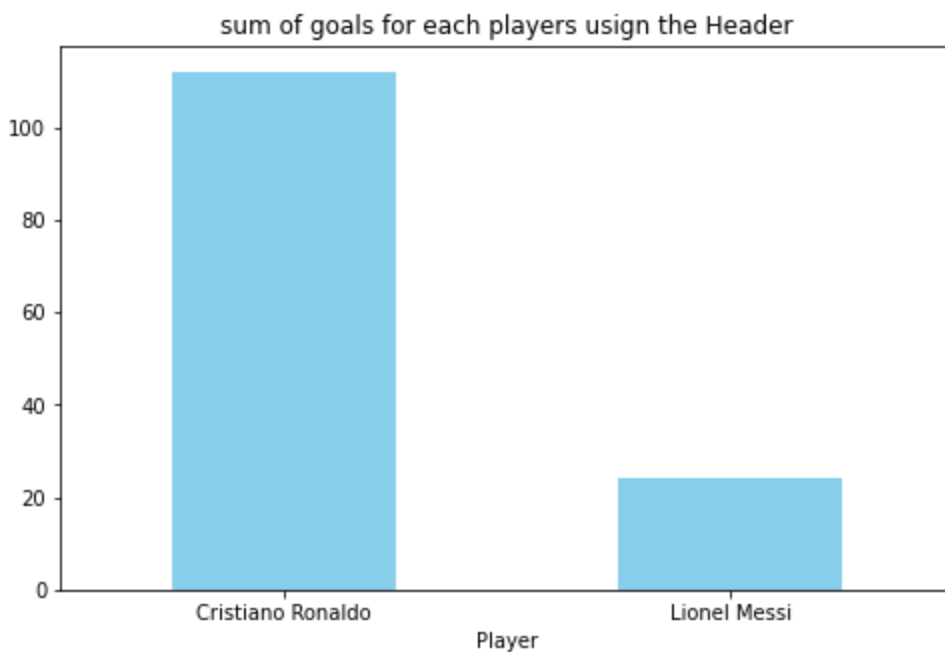Cristiano Ronaldo    112
Lionel Messi          24
Name: Club, dtype: int64
```

In [174…
```python
header_goals = player[player['Goal_Type'] == 'Header'].groupby('Player').count()['Club']
plt.figure(figsize=(8, 5))
header_goals.plot(kind='bar', color='skyblue')
plt.title('sum of goals for each players usign the Header')
plt.xticks(rotation=0)
plt.show()
```

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sum of goals for each players usign the Header

In [148…   `# using his head , Cristiano Ronaldo He scored 112 goals and Lionel Messi 24`

In [26]: `player[player['Goal_Type']=='Solo run'].groupby('Player').count()['Club']`

Out[26]:
```
Player
Cristiano Ronaldo    2
Lionel Messi         4
Name: Club, dtype: int64
```

In [28]:
```python
Solo_run = player[player['Goal_Type'] == 'Solo run'].groupby('Player').count()['Club']
plt.figure(figsize=(8, 5))
Solo_run.plot(kind='bar', color='skyblue')
plt.title('sum of goals for each players by the Solo run')
plt.xticks(rotation=0)
plt.show()
```


sum of goals for each players by the Solo run
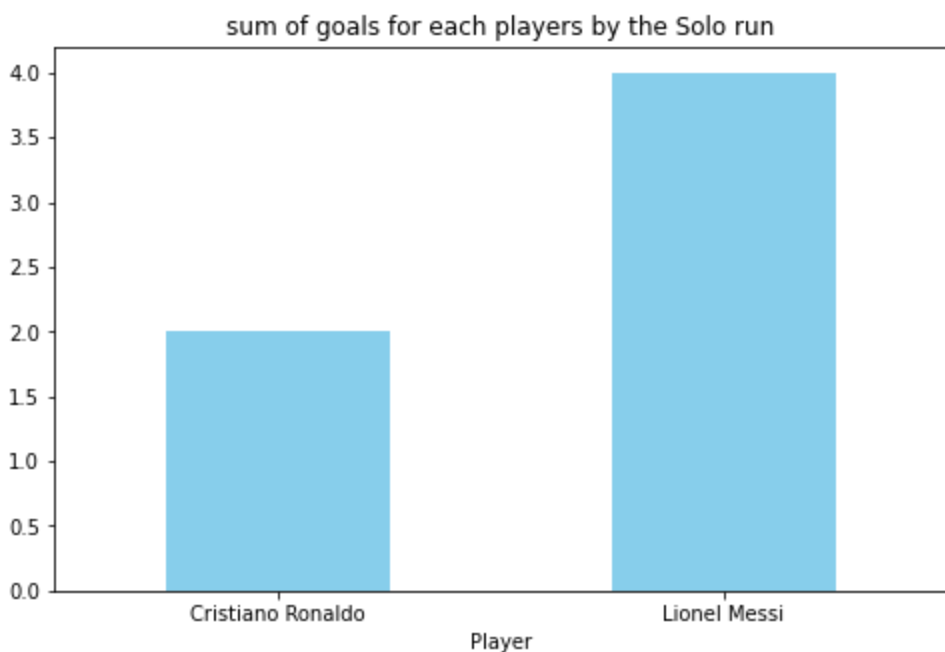
In [ ]: `# in the solo form , Cristiano Ronaldo He scored 2 goals and Lionel Messi 4`

In [153… `player[player['Goal_Type']=='Counter attack goal'].groupby('Player').count()['Club']`

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```
Out[153]:   Player
            Cristiano Ronaldo    6
            Lionel Messi         1
            Name: Club, dtype: int64
```

```python
In [29]:    Counter_attack_goal = player[player['Goal_Type'] == 'Counter attack goal'].groupby('Play
            plt.figure(figsize=(8, 5))
            Counter_attack_goal.plot(kind='bar', color='skyblue')
            plt.title('sum of goals for each players by Counter attack goal')
            plt.xticks(rotation=0)
            plt.show()
```



```python
In [ ]:    # in the Counter attack(Counter attack goal) , Cristiano Ronaldo He scored 6 goals and L
```

```python
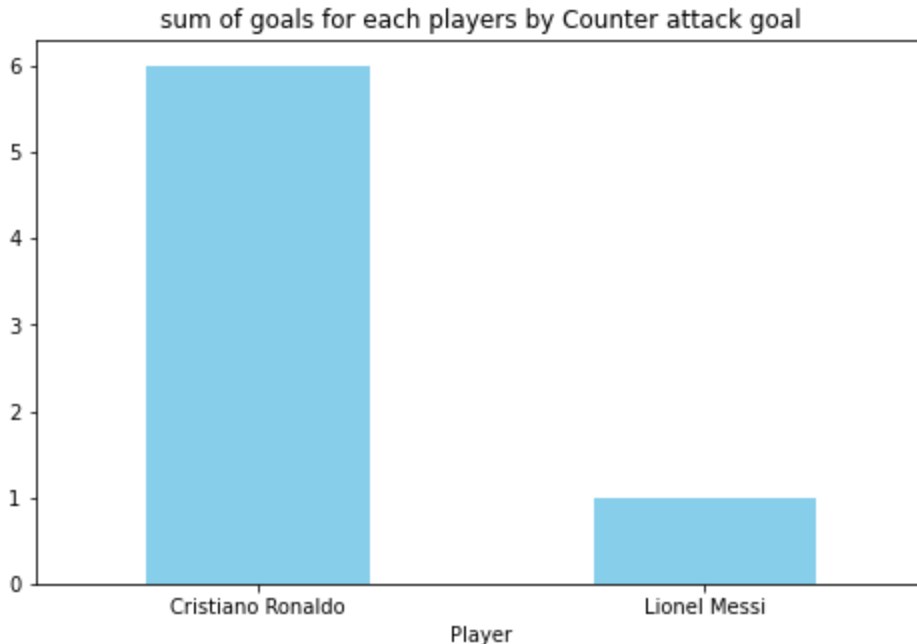In [154…   player[player['Goal_Type']=='Left-footed shot'].groupby('Player').count()['Club']
```

```
Out[154]:   Player
            Cristiano Ronaldo    113
            Lionel Messi         436
            Name: Club, dtype: int64
```

```python
In [31]:    Left_footed_shot = player[player['Goal_Type'] == 'Left-footed shot'].groupby('Player').c
            plt.figure(figsize=(8, 5))
            Left_footed_shot.plot(kind='bar', color='skyblue')
            plt.title('sum of goals for each players by Left-footed shot')
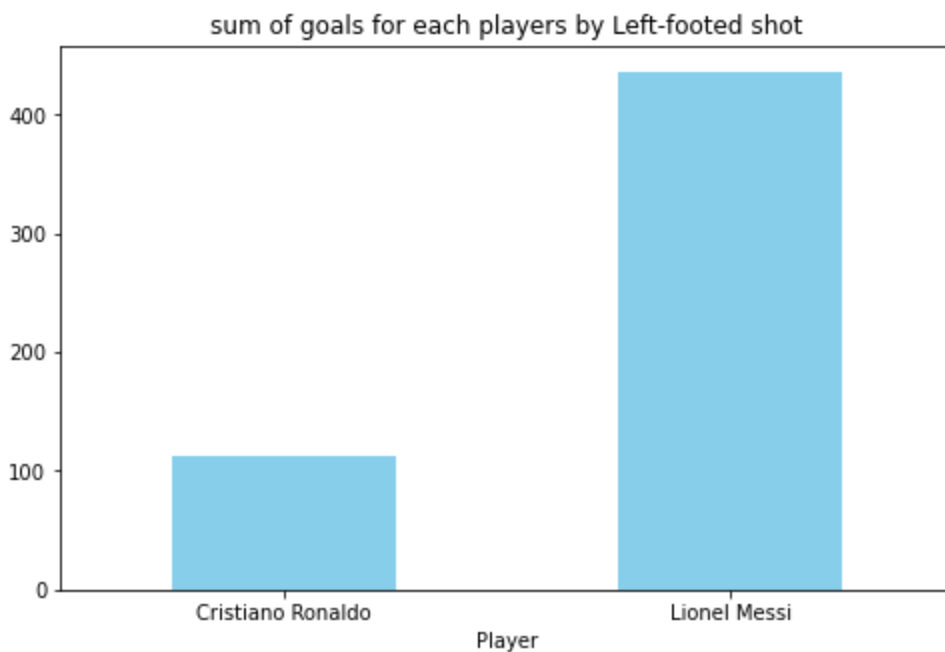            plt.xticks(rotation=0)
            plt.show()
```

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sum of goals for each players by Left-footed shot

In [156…   `# using left footed , Cristiano Ronaldo He scored 113 goals and Lionel Messi 436`

In [157…   `player[player['Goal_Type']=='Right-footed shot'].groupby('Player').count()['Club']`

Out[157]:
```
 Player
 Cristiano Ronaldo    253
 Lionel Messi          85
 Name: Club, dtype: int64
```

In [32]:
```
Right_footed_shot= player[player['Goal_Type'] == 'Right-footed shot'].groupby('Player').
plt.figure(figsize=(8, 5))
Right_footed_shot.plot(kind='bar', color='skyblue')
plt.title('sum of goals for each players by Right-footed shot')
plt.xticks(rotation=0)
plt.show()
```

sum of goals for each players by Right-footed shot

In [159…   `# using Right footed , Cristiano Ronaldo He scored 253 goals and Lionel Messi 85`

In [160…   `player[player['Goal_Type']=='Penalty'].groupby('Player').count()['Club']`

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```
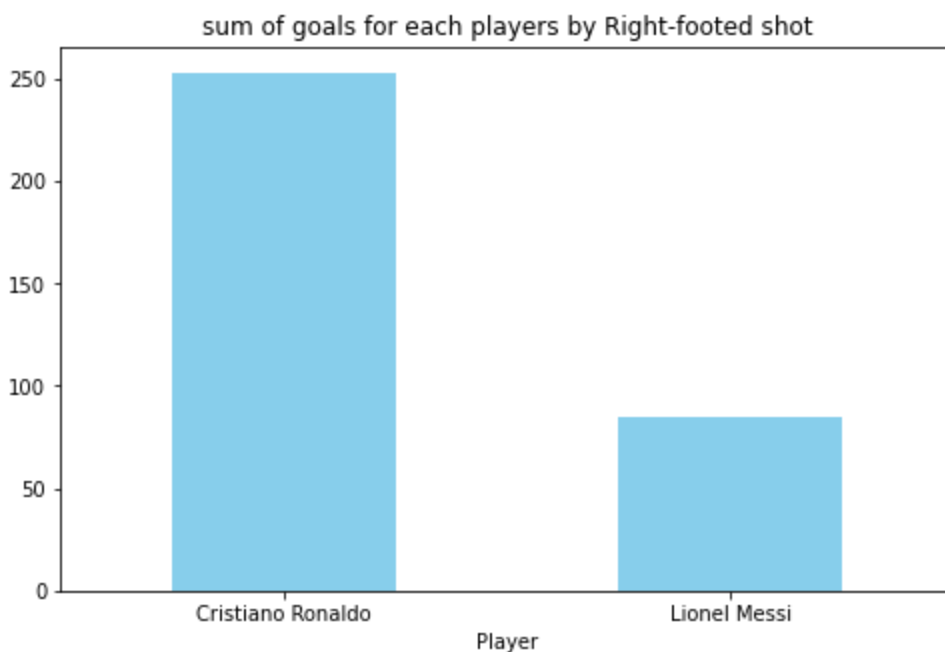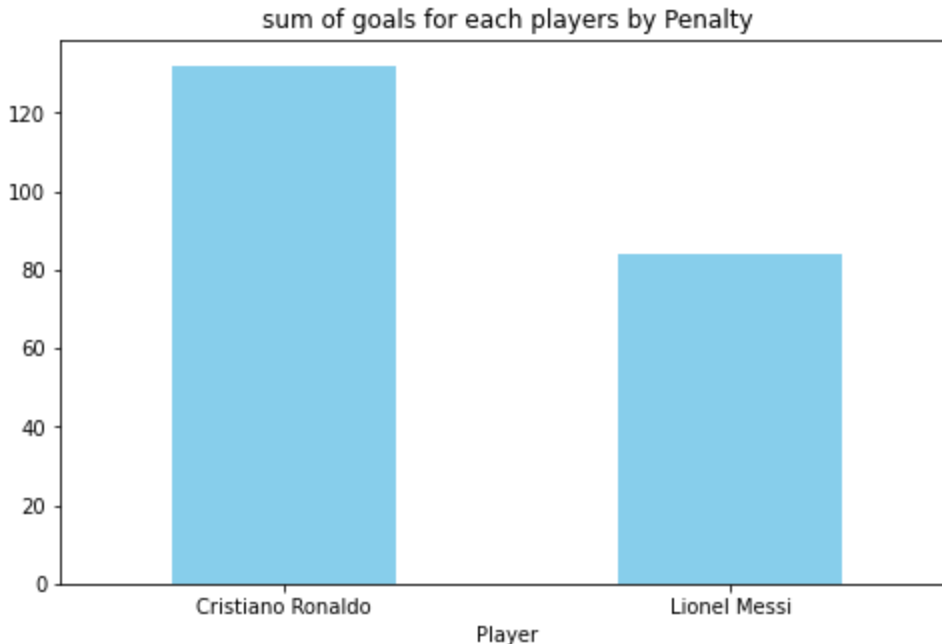Out[160]:  Player
           Cristiano Ronaldo    132
           Lionel Messi          84
           Name: Club, dtype: int64
```

```python
In [33]:   Penalty = player[player['Goal_Type'] == 'Penalty'].groupby('Player').count()['Club']
           plt.figure(figsize=(8, 5))
           Penalty.plot(kind='bar', color='skyblue')
           plt.title('sum of goals for each players by Penalty')
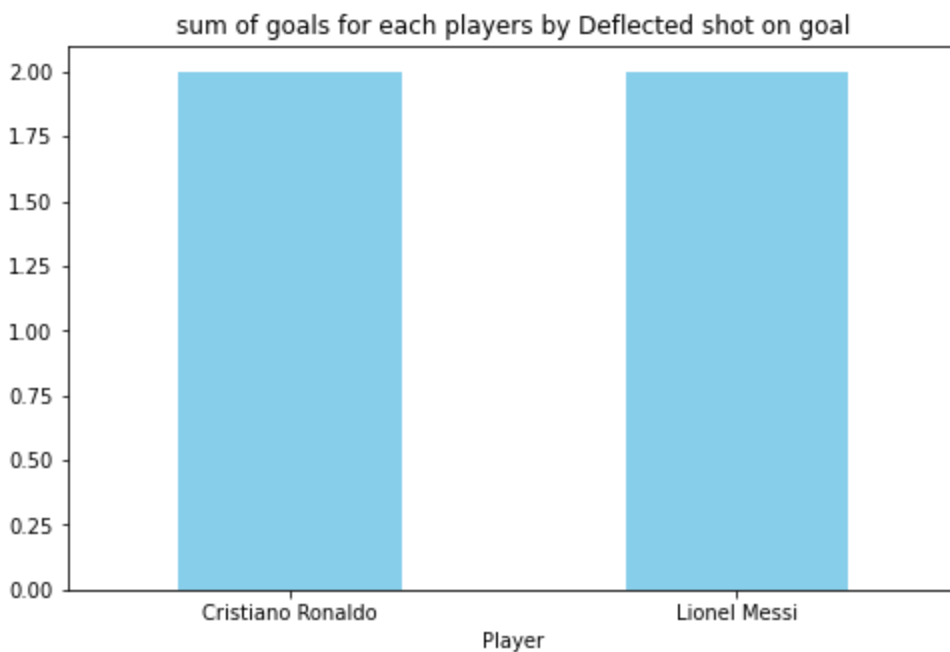           plt.xticks(rotation=0)
           plt.show()
```


sum of goals for each players by Penalty

```python
In [161…   # using Penalty , Cristiano Ronaldo He scored 132 goals and Lionel Messi 84
```

```python
In [163…   player[player['Goal_Type']=='Deflected shot on goal'].groupby('Player').count()['Club']
```

```
Out[163]:  Player
           Cristiano Ronaldo    2
           Lionel Messi         2
           Name: Club, dtype: int64
```

```python
In [34]:   Deflected_shot_on_goal = player[player['Goal_Type'] == 'Deflected shot on goal'].groupby
           plt.figure(figsize=(8, 5))
           Deflected_shot_on_goal.plot(kind='bar', color='skyblue')
           plt.title('sum of goals for each players by Deflected shot on goal')
           plt.xticks(rotation=0)
           plt.show()
```

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sum of goals for each players by Deflected shot on goal

In [162… `# using Deflected shot on goal , Cristiano Ronaldo He scored 2 goals and Lionel Messi 2`

In [164…
```python
player[player['Goal_Type']=='Direct free kick'].groupby('Player').count()['Club']
```

Out[164]:
```
Player
Cristiano Ronaldo    49
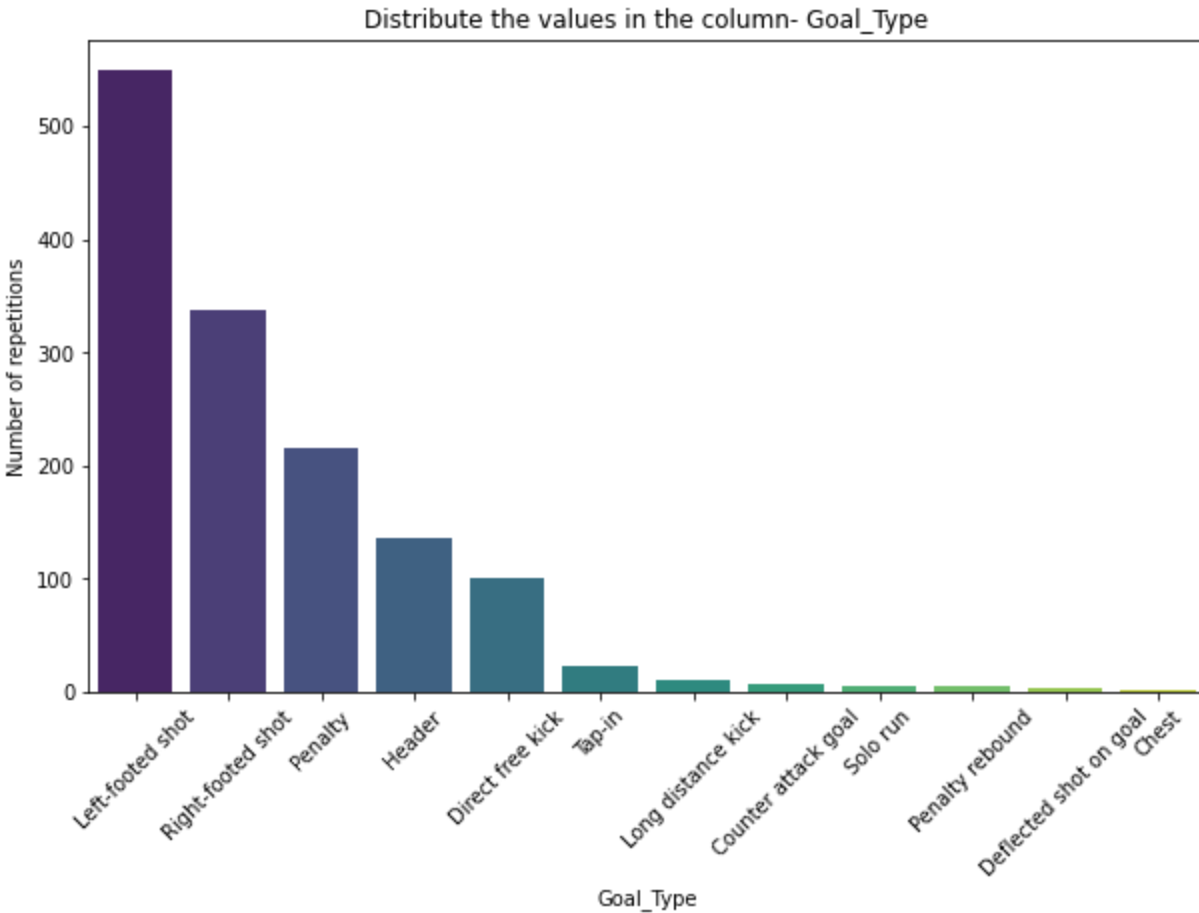Lionel Messi         52
Name: Club, dtype: int64
```

In [35]:
```python
Direct_free_kick = player[player['Goal_Type'] == 'Direct free kick'].groupby('Player').c
plt.figure(figsize=(8, 5))
Direct_free_kick.plot(kind='bar', color='skyblue')
plt.title('sum of goals for each players by Direct free kick')
plt.xticks(rotation=0)
plt.show()
```


sum of goals for each players by Direct free kick

In [255… `# using Direct free kick, Cristiano Ronaldo He scored 49 goals and Lionel Messi 52`

In [252…
```python
column_name = 'Goal_Type'
plt.figure(figsize=(10, 6))
```
Loading [MathJax]/extensions/Safe.js `x=value_counts.index, y=value_counts.values, palette='viridis')`

```
plt.title(f'Distribute the values in the column- {column_name}')
plt.xlabel(column_name)
plt.ylabel('Number of repetitions')
plt.xticks(rotation=45)
plt.show()
```


In [185… `player[player['Club']=='Paris Saint-Germain'].groupby('Player').count()['Club']`

Out[185]:
```
Player
Lionel Messi    31
Name: Club, dtype: int64
```

In [184… `# Lionel Messi played 31 matches with...Paris Saint-Germain`

In [183… `player[player['Club']=='Al-Nassr FC'].groupby('Player').count()['Club']`

Out[183]:
```
Player
Cristiano Ronaldo    9
Name: Club, dtype: int64
```

In [182… `# Cristiano Ronaldo played 9 matches with...Al-Nassr FC`

In [271… `player['Playing_Position'].value_counts()`

Out[271]:
```
CF    485
LW    357
RW    300
RW     95
CF     43
SS     32
SS     23
AM      8
AM      7
LW      5
```

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```
In [256…    player[player['Playing_Position']=='LW'].groupby('Player').count()['Club']

Out[256]:   Player
            Cristiano Ronaldo    356
            Lionel Messi           1
            Name: Club, dtype: int64

In [ ]:     #Left wing (LW) Cristiano Ronaldo 356 , Lionel Messi 1

In [263…    player[player['Playing_Position']=='CF'].groupby('Player').count()['Club']

Out[263]:   Player
            Cristiano Ronaldo    209
            Lionel Messi         276
            Name: Club, dtype: int64

In [ ]:     #Center Forward (CF) Cristiano Ronaldo 209 , Lionel Messi 276

In [272…    player[player['Playing_Position']=='RW'].groupby('Player').count()['Club']

Out[272]:   Player
            Cristiano Ronaldo     79
            Lionel Messi         221
            Name: Club, dtype: int64

In [ ]:     #Right Wing (RF) Cristiano Ronaldo 79 , Lionel Messi 221

In [273…    player[player['Playing_Position']=='SS'].groupby('Player').count()['Club']

Out[273]:   Player
            Lionel Messi    23
            Name: Club, dtype: int64

In [ ]:     #Second attacker (SS) Cristiano Ronaldo 0 , Lionel Messi 23
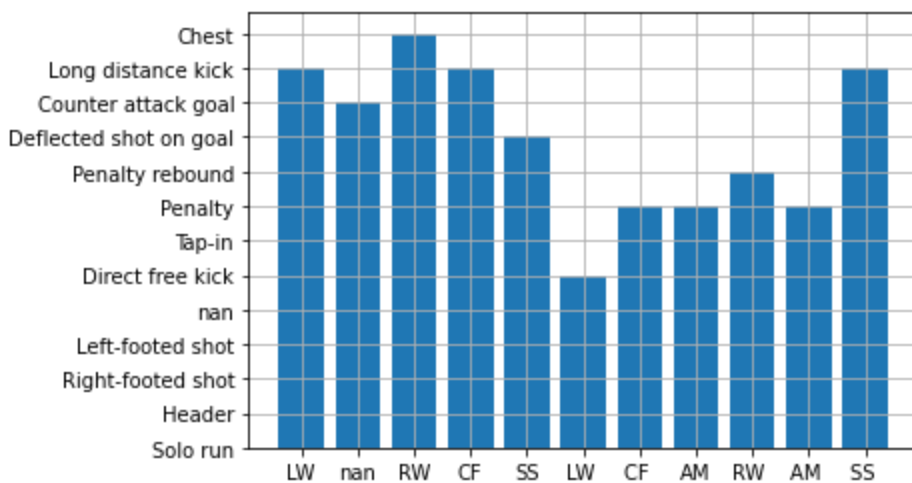
In [274…    player[player['Playing_Position']=='AM'].groupby('Player').count()['Club']

Out[274]:   Player
            Lionel Messi    8
            Name: Club, dtype: int64

In [ ]:     #Attacking Midfield (AM) Cristiano Ronaldo 0 , Lionel Messi 23

In [278…    player['Goal_Type'] = player['Goal_Type'].astype(str)
            player['Playing_Position'] = player['Playing_Position'].astype(str)

            plt.bar(player["Playing_Position"], player['Goal_Type'])
            plt.grid()
            plt.show()
```

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```
In [ ]:  # Most players playing_position for Right Wing and score a goal using chest
```

```
In [4]:  player['Season'].max()
```

```
Out[4]:  'Dec-13'
```

```
In [5]:  player['At_score'].max()
```

```
Out[5]:  '9:01'
```

```
In [6]: player['Minute'].max()
```

```
Out[6]:  '97'
```

```
In [23]:  player[player['Player']=='Cristiano Ronaldo'].groupby('Club').count()['Matchday']
```

```
Out[23]:  Club
          Al-Nassr FC           9
          Juventus FC         101
          Manchester United   145
          Real Madrid         450
          Sporting CP           5
          Name: Matchday, dtype: int64
```

```
In [44]:  x=player[player['Player']=='Cristiano Ronaldo'].groupby('Club').count()['Matchday']
          plt.figure(figsize=(8, 5))
          x.plot(kind='bar', color='skyblue')
          plt.title('Number of matches in each club')
          plt.xticks(rotation=0)
          plt.show()
```

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Number of matches in each club
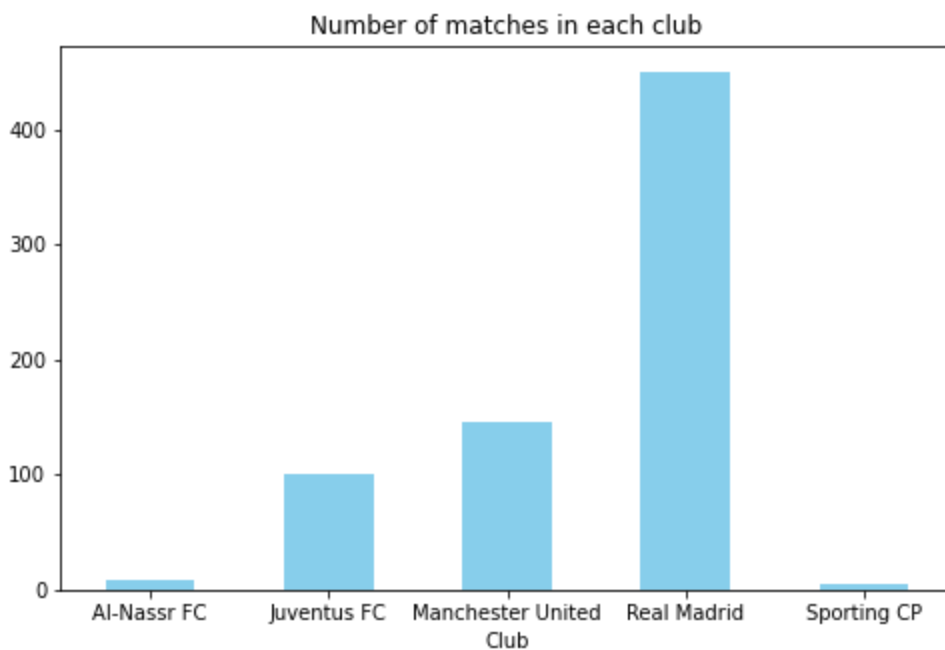
In [38]: `#This graph shows the club Cristiano has played for the most is Real Madrid`

In [42]: `player[player['Player']=='Lionel Messi'].groupby('Club').count()['Matchday']`

Out[42]:
```
Club
FC Barcelona          672
Paris Saint-Germain    31
Name: Matchday, dtype: int64
```

In [45]:
```python
x=player[player['Player']=='Lionel Messi'].groupby('Club').count()['Matchday']
plt.figure(figsize=(8, 5))
x.plot(kind='bar', color='skyblue')
plt.title('Number of matches in each club')
plt.xticks(rotation=0)
plt.show()
```


Number of matches in each club
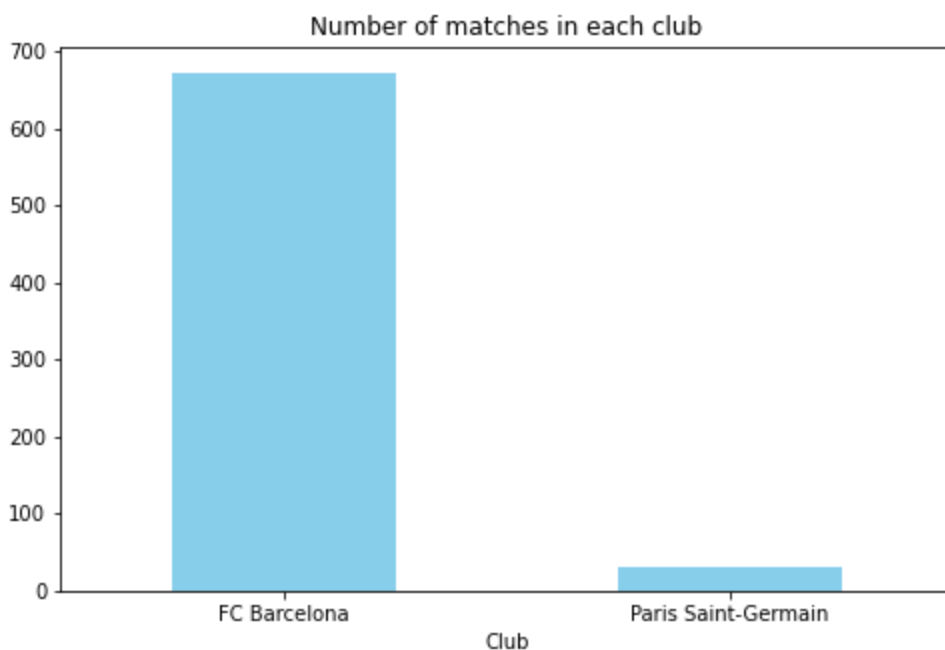
In [46]: `#This graph shows the club Lionel Messi has played for the most is FC Barcelona`

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