

The IPL 2022 Mega Player auction have featured a total of 600 players who were set to go under the hammer in Bengaluru. The initial list had over 1000 cricketers who had registered for the auction. However, the final list was trimmed to 590. There was a total of 217 slots spread across ten franchises up for grabs. Among the 600 players, 229 are capped players, 371 are uncapped players

```
In [1]: # Import necessary libraries
import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
import matplotlib
import warnings
warnings.filterwarnings('ignore')

In [2]: ipl = pd.read_csv('ipl_2022_dataset.csv')
ipl

Out[2]:
   Unnamed: 0  Player  Base Price  TYPE  COST IN ₹ (CR.)  Cost IN $ (000)  2021 Squad  Team
0            0   Ravi Kumar Dhoni  15.0  BOWLER  15.0  1950.0  SRH  Gujarat Titans
1            1   Hardik Pandya  15.0  ALL-ROUNDER  15.0  1950.0  MI  Gujarat Titans
2            2   Lockie Ferguson  10.0  BOWLER  10.0  1300.0  KKR  Gujarat Titans
3            3   Rahul Tewatia  9.0  ALL-ROUNDER  9.0  1170.0  RRR  Gujarat Titans
4            4   Shubman Gill  8.0  BATTER  8.0  1040.0  KKR  Gujarat Titans
...         ...         ...         ...         ...         ...         ...         ...
628          628   Sarfaraz Khan  20 Lakh  BATTER  NaN  NaN  NaN  Unsold
629          629   Manu Singh  20 Lakh  BOWLER  NaN  NaN  NaN  Unsold
630          630   Naveen Ashwini  20 Lakh  BOWLER  NaN  NaN  NaN  Unsold
631          631   Lance Morris  20 Lakh  BOWLER  NaN  NaN  NaN  Unsold
632          632   Aaron Hardie  20 Lakh  ALL-ROUNDER  NaN  NaN  NaN  Unsold

633 rows × 8 columns

In [3]: # To get first 5 rows
ipl.head()

Out[3]:
   Unnamed: 0  Player  Base Price  TYPE  COST IN ₹ (CR.)  Cost IN $ (000)  2021 Squad  Team
0            0   Ravi Kumar Dhoni  15.0  BOWLER  15.0  1950.0  SRH  Gujarat Titans
1            1   Hardik Pandya  15.0  ALL-ROUNDER  15.0  1950.0  MI  Gujarat Titans
2            2   Lockie Ferguson  10.0  BOWLER  10.0  1300.0  KKR  Gujarat Titans
3            3   Rahul Tewatia  9.0  ALL-ROUNDER  9.0  1170.0  RRR  Gujarat Titans
4            4   Shubman Gill  8.0  BATTER  8.0  1040.0  KKR  Gujarat Titans

In [4]: # To get bottom 5 rows
ipl.tail()

Out[4]:
   Unnamed: 0  Player  Base Price  TYPE  COST IN ₹ (CR.)  Cost IN $ (000)  2021 Squad  Team
628          628   Sarfaraz Khan  20 Lakh  BATTER  NaN  NaN  NaN  Unsold
629          629   Manu Singh  20 Lakh  BOWLER  NaN  NaN  NaN  Unsold
630          630   Naveen Ashwini  20 Lakh  BOWLER  NaN  NaN  NaN  Unsold
631          631   Lance Morris  20 Lakh  BOWLER  NaN  NaN  NaN  Unsold
632          632   Aaron Hardie  20 Lakh  ALL-ROUNDER  NaN  NaN  NaN  Unsold

In [6]: # To get the total player present in the dataset
ipl.shape

Out[6]:
(633, 8)

In [7]: ipl.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 633 entries, 0 to 632
Data columns (total 8 columns):
 #   Column  Non-Null Count  Dtype
 #  0   Unnamed: 0  633 non-null      int64
 #  1   Player      633 non-null      object
 #  2   Base Price  633 non-null      object
 #  3   TYPE        633 non-null      object
 #  4   COST IN ₹ (CR.)  237 non-null      float64
 #  5   Cost IN $ (000)  237 non-null      float64
 #  6   2021 Squad  399 non-null      object
 #  7   Team        633 non-null      object
dtypes: float64(2), int64(1), object(5)
memory usage: 39.7+ KB

In [8]: # To get the column names
ipl.columns

Out[8]:
Index(['Unnamed: 0', 'Player', 'Base Price', 'TYPE', 'COST IN ₹ (CR.)',
      'Cost IN $ (000)', '2021 Squad', 'Team'],
      dtype='object')

In [9]: # drop unnecessary column
ipl.drop('Unnamed: 0', axis = 1, inplace = True)

In [10]: ipl.head()

Out[10]:
   Player  Base Price  TYPE  COST IN ₹ (CR.)  Cost IN $ (000)  2021 Squad  Team
0   Ravi Kumar Dhoni  15.0  BOWLER  15.0  1950.0  SRH  Gujarat Titans
1   Hardik Pandya  15.0  ALL-ROUNDER  15.0  1950.0  MI  Gujarat Titans
2   Lockie Ferguson  10.0  BOWLER  10.0  1300.0  KKR  Gujarat Titans
3   Rahul Tewatia  9.0  ALL-ROUNDER  9.0  1170.0  RRR  Gujarat Titans
4   Shubman Gill  8.0  BATTER  8.0  1040.0  KKR  Gujarat Titans

In [11]: # To check the null values
ipl.isnull().sum()

Out[11]:
Player      0
Base Price  0
TYPE        0
COST IN ₹ (CR.)  396
Cost IN $ (000)  396
2021 Squad  434
Team        0
dtype: int64

In [12]: ipl[ipl['Cost IN $ (000)'] != null()]

Out[12]:
   Player  Base Price  TYPE  COST IN ₹ (CR.)  Cost IN $ (000)  2021 Squad  Team
227   Sarfaraz Khan  2.0  BATTER  NaN  NaN  CSK  Unsold
236   Sarfaraz Khan  2.0  BATTER  NaN  NaN  DC  Unsold
239   Shashank Singh  2.0  ALL-ROUNDER  NaN  NaN  KKR  Unsold
240   Anil Mishra  1.5  BOWLER  NaN  NaN  DC  Unsold
241   Anil Mishra  2.0  BOWLER  NaN  NaN  PBKS  Unsold
...         ...         ...         ...         ...         ...         ...
628   Sarfaraz Khan  20 Lakh  BATTER  NaN  NaN  NaN  Unsold
629   Manu Singh  20 Lakh  BOWLER  NaN  NaN  NaN  Unsold
630   Naveen Ashwini  20 Lakh  BOWLER  NaN  NaN  NaN  Unsold
631   Lance Morris  20 Lakh  BOWLER  NaN  NaN  NaN  Unsold
632   Aaron Hardie  20 Lakh  ALL-ROUNDER  NaN  NaN  NaN  Unsold

396 rows × 7 columns

In [13]: ipl[ipl['COST IN ₹ (CR.)'] != ipl['COST IN ₹ (CR.)'].fillna(0)]
ipl[ipl['Cost IN $ (000)'] != ipl['Cost IN $ (000)'].fillna(0)]

In [14]: ipl[ipl['2021 Squad'] != null()]

Out[14]:
   Player  Base Price  TYPE  COST IN ₹ (CR.)  Cost IN $ (000)  2021 Squad  Team
6   Yash Dayal  20 Lakh  BOWLER  3.2  416.0  NaN  Gujarat Titans
9   Ashwin Sedarani  20 Lakh  BATTER  2.6  338.0  NaN  Gujarat Titans
10   Matthew Wade  2.0  WICKETKEEPER  2.4  312.0  NaN  Gujarat Titans
11   Azam Joseph  75 Lakh  BOWLER  2.4  312.0  NaN  Gujarat Titans
17   Varun Aaron  50 Lakh  BATTER  0.5  65.0  NaN  Gujarat Titans
...         ...         ...         ...         ...         ...         ...
628   Sarfaraz Khan  20 Lakh  BATTER  0.0  0.0  NaN  Unsold
629   Manu Singh  20 Lakh  BOWLER  0.0  0.0  NaN  Unsold
630   Naveen Ashwini  20 Lakh  BOWLER  0.0  0.0  NaN  Unsold
631   Lance Morris  20 Lakh  BOWLER  0.0  0.0  NaN  Unsold
632   Aaron Hardie  20 Lakh  ALL-ROUNDER  0.0  0.0  NaN  Unsold

434 rows × 7 columns

In [15]: ipl[ipl['2021 Squad'] != ipl['2021 Squad'].fillna('Not Participated')]

In [16]: ipl.isnull().sum()

Out[16]:
Player      0
Base Price  0
TYPE        0
COST IN ₹ (CR.)  0
Cost IN $ (000)  0
2021 Squad  0
Team        0
dtype: int64

In [18]: teams = ipl[ipl['COST IN ₹ (CR.)'] > 0]['Team'].unique()

array(['Gujarat Titans', 'Chennai Super Kings', 'Delhi Capitals',
      'Kolkata Knight Riders', 'Punjab Kings', 'Lucknow Super Giants',
      'Mumbai Indians', 'Royal Challengers Bangalore',
      'Rajasthan Royals', 'Sunrisers Hyderabad'], dtype=object)

In [20]: ipl['status'] = ipl['Team'].replace(teams, 'sold')
ipl.head()

Out[20]:
   Player  Base Price  TYPE  COST IN ₹ (CR.)  Cost IN $ (000)  2021 Squad  Team  status
0   Ravi Kumar Dhoni  15.0  BOWLER  15.0  1950.0  SRH  Gujarat Titans  sold
1   Hardik Pandya  15.0  ALL-ROUNDER  15.0  1950.0  MI  Gujarat Titans  sold
2   Lockie Ferguson  10.0  BOWLER  10.0  1300.0  KKR  Gujarat Titans  sold
3   Rahul Tewatia  9.0  ALL-ROUNDER  9.0  1170.0  RRR  Gujarat Titans  sold
4   Shubman Gill  8.0  BATTER  8.0  1040.0  KKR  Gujarat Titans  sold

In [21]: ipl

Out[21]:
   Player  Base Price  TYPE  COST IN ₹ (CR.)  Cost IN $ (000)  2021 Squad  Team  status
0   Ravi Kumar Dhoni  15.0  BOWLER  15.0  1950.0  SRH  Gujarat Titans  sold
1   Hardik Pandya  15.0  ALL-ROUNDER  15.0  1950.0  MI  Gujarat Titans  sold
2   Lockie Ferguson  10.0  BOWLER  10.0  1300.0  KKR  Gujarat Titans  sold
3   Rahul Tewatia  9.0  ALL-ROUNDER  9.0  1170.0  RRR  Gujarat Titans  sold
4   Shubman Gill  8.0  BATTER  8.0  1040.0  KKR  Gujarat Titans  sold
...         ...         ...         ...         ...         ...         ...
628   Sarfaraz Khan  20 Lakh  BATTER  0.0  0.0  Not Participated  Unsold  Unsold
629   Manu Singh  20 Lakh  BOWLER  0.0  0.0  Not Participated  Unsold  Unsold
630   Naveen Ashwini  20 Lakh  BOWLER  0.0  0.0  Not Participated  Unsold  Unsold
631   Lance Morris  20 Lakh  BOWLER  0.0  0.0  Not Participated  Unsold  Unsold
632   Aaron Hardie  20 Lakh  ALL-ROUNDER  0.0  0.0  Not Participated  Unsold  Unsold

633 rows × 8 columns

In [22]: # To check duplicate players
ipl[ipl['Player'].duplicated(keep = False)]

Out[22]:
   Player  Base Price  TYPE  COST IN ₹ (CR.)  Cost IN $ (000)  2021 Squad  Team  status
42   Laxmi Yadav  20 Lakh  ALL-ROUNDER  0.65  84.5  DC  Delhi Capitals  sold
240   Anil Mishra  1.5  BOWLER  0.00  0.0  DC  Unsold  Unsold
518   Shashank Singh  20 Lakh  BOWLER  0.00  0.0  Not Participated  Unsold  Unsold
519   Laxmi Yadav  20 Lakh  BOWLER  0.00  0.0  Not Participated  Unsold  Unsold
547   Shashank Singh  20 Lakh  ALL-ROUNDER  0.00  0.0  Not Participated  Unsold  Unsold
548   Shashank Singh  20 Lakh  BOWLER  0.00  0.0  Not Participated  Unsold  Unsold
569   Shashank Singh  20 Lakh  ALL-ROUNDER  0.00  0.0  Not Participated  Unsold  Unsold

In [23]: # To check total players participated in 2022 IPL
ipl.shape[0]

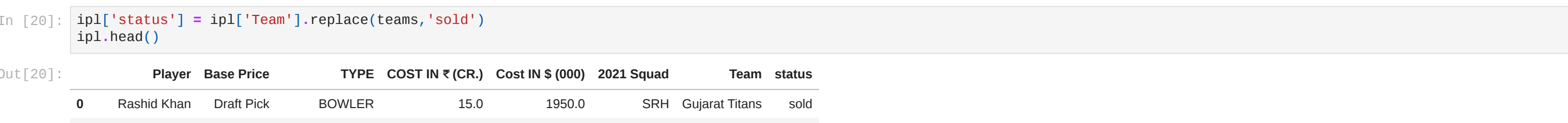
Out[23]:
633

In [24]: # To check the types of players participated in 2022 IPL
types = ipl['TYPE'].value_counts()
types.reset_index()

Out[24]:
   index  TYPE
0  ALL-ROUNDER  242
1  BATTER  215
3  WICKETKEEPER  64

Data Visualization
```

```
In [26]: # Using the above table to create a pie chart
plt.pie(types.values, labels = types.index, labeldistance = 1.2, autopct = '%1.2f%%', shadow = True, startangle = 60)
plt.title('Role of Players Participated', fontsize = 15)
plt.show()
```

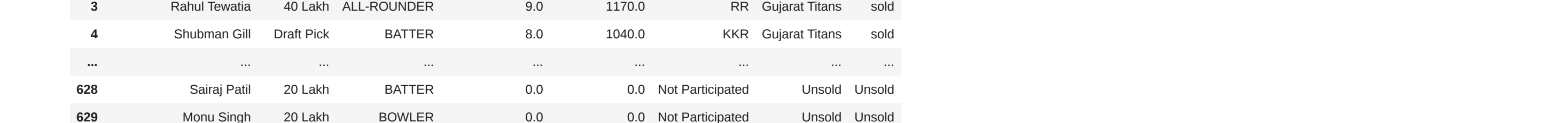


Observations

- Here we have a All Rounder in 38.23%
- Bowler in 33.97%
- Batter in 33.97%
- Wicketkeeper in 10.11%

```
In [28]: # Players sold and unsold using a bar graph.
plt.figure(figsize=(20,10))
fig = sns.countplot(ipl['status'], palette = ['Orange', 'Pink'])
plt.xlabel('Sold or Unsold')
plt.ylabel('Number of Players')
plt.title('Sold vs Unsold', fontsize = 15)
plt.show()

for p in fig.patches:
    fig.annotate(format(p.get_height(), '.0f'), (p.get_x() +
    p.get_width()/2, p.get_height()), ha = 'center', va = 'center',
    xytext = (0,4), textcoords = 'offset points')
```



Observation

- Here we have a bar plot which is total 237 players sold and 396 players unsold.

```
In [31]: # print the total sold and unsold value
ipl.groupby('status')['Player'].count()

status
Unsold    396
Sold      237
Name: Player, dtype: int64

In [32]: # Total number of players bought by each team
plt.figure(figsize=(20,10))
fig = sns.countplot(ipl[ipl['Team'] != 'Unsold']['Team'])
plt.xlabel('Team Names')
plt.ylabel('Number of Players')
plt.title('Players Bought by Each Team', fontsize = 12)
plt.show()

for p in fig.patches:
    fig.annotate(format(p.get_height(), '.0f'), (p.get_x() +
    p.get_width()/2, p.get_height()), ha = 'center', va = 'center',
    xytext = (0,4), textcoords = 'offset points')
```



Observation

- The maximum the team can purchase 25 players
- Here Chennai Super Kings, Kolkata Knight Riders, Punjab Kings, Mumbai Indians are have 25 players respectively.
- Gujarat Titans, Lucknow Super Giants, Royal Challengers Bangalore are have 22 players respectively.
- Delhi Capitals, Rajasthan Royals have 24 players respectively.
- Sunrisers Hyderabad have 23 players.

```
In [33]: ipl['retention'] = ipl['Base Price']

In [34]: ipl['retention'].replace(['2 Cr.', '40 Lakh', '1 Cr.', '75 Lakh', '50 Lakh', '30 Lakh', '1.5 Cr.', 'From Auction'], inplace = True)

In [35]: # Treating Base Price
ipl['Base Price'].replace(['Draft Pick', 0], inplace = True)

In [36]: ipl['base_price_unit'] = ipl['Base Price'].apply(lambda x: str(x).split('.')[1])
ipl['base_price'] = ipl['Base Price'].apply(lambda x: str(x).split('.')[0])

In [37]: ipl['base_price'].replace('Retained', 0, inplace = True)

In [38]: ipl.head()
```

	Player	Base Price	TYPE	COST IN ₹ (CR.)	Cost IN \$ (000)	2021 Squad	Team	status	retention	base_price_unit	base_price
0	Ravi Kumar Dhoni	0	BOWLER	15.0	1950.0	SRH	Gujarat Titans	sold	Draft Pick	0	0
1	Hardik Pandya	0	ALL-ROUNDER	15.0	1950.0	MI	Gujarat Titans	sold	Draft Pick	0	0
2	Lockie Ferguson	10	BOWLER	10.0	1300.0	KKR	Gujarat Titans	sold	From Auction	Cr	2
3	Rahul Tewatia	40 Lakh	ALL-ROUNDER	9.0	1170.0	RRR	Gujarat Titans	sold	From Auction	Lakh	40
4	Shubman Gill	0	BATTER	8.0	1040.0	KKR	Gujarat Titans	sold	Draft Pick	0	0

```
In [41]: # Total Players retained and bought
ipl.groupby(['Team', 'retention']).count()[['Team']]

Team
Chennai Super Kings    retention
Retained              9
Retained              4
From Auction          12
Gujarat Titans         retention
Retained              4
Retained              5
Draft Pick            3
Kolkata Knight Riders  retention
Retained              4
Draft Pick            3
Lucknow Super Giants   retention
Retained              4
Draft Pick            3
Mumbai Indians         retention
From Auction          11
Retained              4
Punjab Kings           retention
From Auction          12
Retained              2
Rajasthan Royals       retention
Retained              7
From Auction          14
Royal Challengers Bangalore  retention
Retained              13
Retained              9
Sunrisers Hyderabad   retention
From Auction          11
Retained              3
Unsold                 retention
Retained              29
Name: retention, dtype: int64

In [42]: # Player retained at max price
ipl[ipl['retention'] == 'Retained'].sort_values(by = 'COST IN ₹ (CR.)', ascending = False).head(1)
```

	Player	Base Price	TYPE	COST IN ₹ (CR.)	Cost IN \$ (000)	2021 Squad	Team	status	retention	base_price_unit	base_price
22	Ravindra Jadeja	Retained	ALL-ROUNDER	16.0	2080.0	CSK	Chennai Super Kings	sold	Retained	Retained	0

```
In [43]: # TOP 5 Bowlers
ipl[ipl['retention'] == 'From Auction'] & ipl['TYPE'] == 'BOWLER'].sort_values(by = 'COST IN ₹ (CR.)', ascending = False)

Out[43]:
   Player  Base Price  TYPE  COST IN ₹ (CR.)  Cost IN $ (000)  2021 Squad  Team  status  retention  base_price_unit  base_price
23   Deepak Chahar  2.0  BOWLER  14.00  1820.0  CSK  Chennai Super Kings  sold  From Auction  Cr  2
48   Shashank Thakur  2.0  BOWLER  10.75  1397.5  CSK  Delhi Capitals  sold  From Auction  Cr  2
2   Lockie Ferguson  2.0  BOWLER  10.00  1300.0  KKR  Gujarat Titans  sold  From Auction  Cr  2
18   Pankaj Singh  1.0  BOWLER  10.00  1200.0  KKR  Rajasthan Royals  sold  From Auction  Cr  1
92   Kagiso Rabada  2.0  BOWLER  9.25  1202.5  DC  Punjab Kings  sold  From Auction  Cr  2
...         ...         ...         ...         ...         ...         ...         ...
296   Rahul Mishra  50 Lakh  BOWLER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
296   Hayden Walsh  50 Lakh  BOWLER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
315   Ben Dwarshuis  30 Lakh  BOWLER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  30
325   Jashdeep Singh  30 Lakh  BOWLER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  30
529   Brad Wheal  50 Lakh  BOWLER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50

94 rows × 11 columns

In [49]: # TOP 5 BATTER
ipl[ipl['retention'] == 'From Auction'] & ipl['TYPE'] == 'BATTER'].sort_values(by = 'COST IN ₹ (CR.)', ascending = False)

Out[50]:
   Player  Base Price  TYPE  COST IN ₹ (CR.)  Cost IN $ (000)  2021 Squad  Team  status  retention  base_price_unit  base_price
71   Shreyas Iyer  2.0  BATTER  12.25  1592.5  DC  Kolkata Knight Riders  sold  From Auction  Cr  1
193   Shreyas Iyer  1.5  BATTER  8.50  1106.0  DC  Rajasthan Royals  sold  From Auction  Cr  1.5
217   Rahul Tripathi  40 Lakh  BATTER  8.25  1106.0  KKR  Sunrisers Hyderabad  sold  From Auction  Lakh  40
100   Rohan Sharma  2.0  BATTER  8.50  1107.5  DC  Punjab Kings  sold  From Auction  Cr  2
195   Devdutt Padikal  2.0  BATTER  7.75  1007.5  RCB  Rajasthan Royals  sold  From Auction  Cr  2
173   Faf du Plessis  1.0  BATTER  7.00  900.0  CSK  Royal Challengers Bangalore  sold  From Auction  Cr  2
53   David Warner  2.0  BATTER  6.25  812.5  SRH  Delhi Capitals  sold  From Auction  Cr  1
129   Manish Pandey  1.0  BATTER  4.60  596.0  SRH  Lucknow Super Giants  sold  From Auction  Cr  1
7   David Miller  1.0  BATTER  3.00  390.0  RR  Gujarat Titans  sold  From Auction  Cr  1
56   Rohan Sharma  75 Lakh  BATTER  2.80  364.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
226   Aiden Markram  1.0  BATTER  2.60  338.0  PBKS  Sunrisers Hyderabad  sold  From Auction  Cr  1
31   Robin Uthappa  2.0  BATTER  2.00  260.0  CSK  Chennai Super Kings  sold  From Auction  Cr  2
12   Jason Roy  2.0  BATTER  2.00  260.0  SRH  Gujarat Titans  sold  From Auction  Cr  2
132   Eoin Lewis  2.0  BATTER  2.00  260.0  RR  Lucknow Super Giants  sold  From Auction  Cr  1.5
82   Alex Hales  1.5  BATTER  1.50  195.0  Not Participated  Unsold  Unsold  From Auction  Cr  2
63   Manish Pandey  50 Lakh  BATTER  1.40  182.0  KKR  Rajasthan Royals  sold  From Auction  Lakh  50
201   Manpreet Singh  50 Lakh  BATTER  1.10  143.0  PBKS  Delhi Capitals  sold  From Auction  Lakh  50
209   Devon Conway  1.0  BATTER  1.00  130.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
317   Ananya Kulkarni  1.0  BATTER  1.00  130.0  Not Participated  Unsold  Unsold  From Auction  Cr  1
204   Basim Van Der Duyn  1.0  BATTER  1.00  130.0  Not Participated  Unsold  Unsold  From Auction  Cr  1
181   Finn Allen  50 Lakh  BATTER  0.80  104.0  RCB  Royal Challengers Bangalore  sold  From Auction  Lakh  50
212   Bhuvaneshwar Kumar  50 Lakh  BATTER  0.50  65.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
330   Rilee Rossouw  1.0  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Cr  1
400   Hashmatullah Shahidi  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
399   Kurtis Patterson  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
398   Pathum Nissanka  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
372   Zubayr Hamza  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
396   Anshika Fernando  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
395   Shamane Brooks  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
326   Darren Bravo  75 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  75
274   Laurence Cole  40 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  40
300   Haywood Rutherford  40 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  40
335   Hazratullah Zaki  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
334   James Vince  2.0  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Cr  2
333   Harmanvinder Singh  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
232   Paul Stirling  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
252   David Malen  1.5  BATTER  0.00  0.0  PBKS  Unsold  Unsold  From Auction  Cr  1.5
330   Janneman Malen  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
320   Brandon King  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
328   Usman Khawaja  1.5  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Cr  1.5
301   Martin Gupill  75 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  75
301   Tim Kohler-Cadmore  40 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  40
274   Najibul Kabir  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50
273   Chris Lynn  1.5  BATTER  0.00  0.0  MI  Unsold  Unsold  From Auction  Cr  1.5
254   Sayahat Tawary  50 Lakh  BATTER  0.00  0.0  MI  Unsold  Unsold  From Auction  Lakh  50
255   Cheteshwar Pujara  50 Lakh  BATTER  0.00  0.0  CSK  Unsold  Unsold  From Auction  Lakh  50
253   Eoin Morgan  1.5  BATTER  0.00  0.0  KKR  Unsold  Unsold  From Auction  Cr  1.5
251   Marcus Labuschagne  1.0  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Cr  1
250   Aaron Finch  1.5  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Cr  1.5
238   Steve Smith  2.0  BATTER  0.00  0.0  DC  Unsold  Unsold  From Auction  Cr  2
237   Suresh Raina  2.0  BATTER  0.00  0.0  CSK  Unsold  Unsold  From Auction  Cr  2
401   Manoj Tiwary  50 Lakh  BATTER  0.00  0.0  Not Participated  Unsold  Unsold  From Auction  Lakh  50

86 rows × 11 columns

In [52]: ipl = ipl.rename(columns = {'2021 Squad' = 'Prev_team'})

In [54]: unsold_players = ipl[ipl.Prev_team != 'Unsold'].copy()
ipl[ipl.Prev_team != 'Unsold'][['Player', 'Prev_team']]

In [55]: print(unsold_players)
```

	Player	Prev_team
237	Suresh Raina	CSK
238	Steve Smith	DC
239	Shakib Al Hasan	KKR
240	Anil Mishra	DC
241	Anil Mishra	PBKS
242	Irfan Tahir	CSK
243	Mujeeb Zadran	SRH
244	Adnan Zampa	RCB
245	Ben Cutting	RCB
246	Mohammed Asharudeen	RCB
247	R. Siddharth	DC
252	David Miller	PBKS
253	Eoin Morgan	KKR
254	Cheteshwar Pujara	CSK
255	Saurabh Tiwary	MI
257	Isbatul Shaheer	MI
259	Piyush Chawla	MI
260	Tahiriz Shamsi	RCB
262	Sachin Baby	RCB
288	Andrew Tye	RR
289	Sandeep Narain	RR
311	Shreyas Gowtham	SRH
313	Aditya Tare	MI
317	Lukman Hussain	RCB
325	Jalaj Saxena	PBKS
327	Ben Cutting	RCB
339	Moises Henriques	PBKS
342	Scott Kugelelly	KKR
343	Dhawal Kularni	MI
348	Kane Richardson	RCB
484	Kedar Jadhav	SRH
429	Yuvraj Chahal	MI
447	Kulwant Khejraliya	DC
623	Agalvishva Aiyappa	PBKS

In [ ]: