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Dataset link-

https://www.kaggle.com/datasets/bryanb/fifa-player-stats-database?resource=download

DATASET : FIFA22_official_data

ID	Name	Age	Photo	Nationality	Flag	Overall	Potential	Club	Club Logo	Value	Wage	Special	Preferred	International	Weak Foot	Skill Move	Work Rate	Body Type	Real Face	Position	Jersey Number	Joined	Loaned From	Contract Valid	Height	Weight	Crossing	Finishing	HeadingA	ShortPassing
212198	Bruno Fern	26	https://cd	Portugal	https://cd	88	89	Manchest	https://cd	€107.5M	€250K	2341	Right	3	3	4	High/ Mec	Unique	Yes	<span clas		18 Jan 30, 20	nan	2025	179cm	69kg	87	83	64	91
209658	L. Goretzk	26	https://cd	Germany	https://cd	87	88	FC Bayern	https://cd	€93M	€140K	2314	Right	4	4	3	High/ Mec	Unique	Yes	<span clas		8 Jul 1, 201	nan	2026	189cm	82kg	75	82	86	86
176580	L. Suárez	34	https://cd	Uruguay	https://cd	88	88	Atlético	https://cd	€44.5M	€135K	2307	Right	5	4	3	High/ Mec	Unique	Yes	<span clas		9 Sep 25, 20	nan	2022	182cm	83kg	80	93	84	83
192985	K. De Bruy	30	https://cd	Belgium	https://cd	91	91	Manchest	https://cd	€125.5M	€350K	2304	Right	4	5	4	High/ Higl	Unique	Yes	<span clas		17 Aug 30, 20	nan	2025	181cm	70kg	94	82	55	94
224334	M. Acuña	29	https://cd	Argentina	https://cd	84	84	Sevilla FC	https://cd	€37M	€45K	2292	Left	2	3	4	High/ Higl	Stocky (17	No	<span clas		19 Sep 14, 20	nan	2024	172cm	69kg	87	66	58	82
212622	J. Kimmich	26	https://cd	Germany	https://cd	89	90	FC Bayern	https://cd	€108M	€160K	2283	Right	4	4	3	High/ Mec	Lean (170	Yes	<span clas		6 Jul 1, 2015	nan	2025	177cm	75kg	91	68	72	87
187961	Paulinho	32	https://cd	Brazil	https://cd	83	83	Al Ahli	https://cd	€28.5M	€61K	2273	Right	3	4	4	High/ Higl	Normal (1	Yes	<span clas		15 Jul 22, 20	nan	2024	183cm	80kg	67	83	85	82
181291	G. Wijnald	30	https://cd	Netherlan	https://cd	84	84	Paris Saint	https://cd	€40.5M	€115K	2271	Right	3	4	4	High/ Higl	Unique	Yes	<span clas		18 Jul 1, 2021	nan	2024	175cm	74kg	72	75	78	87
208333	E. Can	27	https://cd	Germany	https://cd	82	83	Borussia C	https://cd	€35M	€72K	2270	Right	3	4	3	Medium/ l	Stocky (18	Yes	<span clas		23 Feb 18, 20	nan	2024	186cm	86kg	69	76	82	83
194765	A. Griezm	30	https://cd	France	https://cd	85	85	Atlético	https://cd	€53M	€220K	2259	Left	4	3	4	Medium/ l	Unique	Yes	<span clas		8 nan	<a href="/	Jun 30, 20	176cm	73kg	83	84	83	84
177003	L. Modrić	35	https://cd	Croatia	https://cd	87	87	Real Madr	https://cd	€32M	€190K	2253	Right	4	4	4	Medium/ l	Lean (170	Yes	<span clas		10 Aug 1, 201	nan	2022	172cm	66kg	86	72	55	91
226161	Marcos Llc	26	https://cd	Spain	https://cd	86	89	Atlético	https://cd	€88M	€95K	2252	Right	3	4	3	High/ Mec	Lean (170	Yes	<span clas		14 Jul 1, 2015	nan	2027	184cm	74kg	74	81	67	86
155862	Sergio Ran	35	https://cd	Spain	https://cd	88	88	Paris Saint	https://cd	€24M	€115K	2251	Right	4	3	3	High/ Mec	Unique	Yes	<span clas		4 Jul 8, 2021	nan	2023	184cm	82kg	66	65	92	82
197445	D. Alaba	29	https://cd	Austria	https://cd	84	84	Real Madr	https://cd	€35.5M	€195K	2247	Left	4	4	3	Medium/ l	Normal (1	Yes	<span clas		4 Jul 1, 2021	nan	2026	180cm	78kg	80	60	74	85
225193	Merino	25	https://cd	Spain	https://cd	83	87	Real Socie	https://cd	€50M	€47K	2244	Left	1	3	3	High/ Higl	Unique	Yes	<span clas		8 Jul 12, 201	nan	2025	189cm	83kg	77	79	81	84
224232	N. Barella	24	https://cd	Italy	https://cd	86	89	Inter	https://cd	€63.5M	€120K	2236	Right	3	3	3	High/ Higl	Normal (1	Yes	<span clas		23 Sep 1, 202	nan	2024	172cm	68kg	69	69	53	86
211462	Alex Telles	28	https://cd	Brazil	https://cd	82	82	Manchest	https://cd	€27.5M	€130K	2235	Left	3	2	3	High/ Mec	Unique	Yes	<span clas		27 Oct 5, 202	nan	2024	181cm	71kg	86	63	68	82
228702	F. de Jong	24	https://cd	Netherlan	https://cd	87	92	FC Barcelc	https://cd	€119.5M	€210K	2229	Right	3	3	4	High/ Mec	Unique	Yes	<span clas		21 Jul 1, 2015	nan	2026	180cm	74kg	78	72	72	91
204923	M. Sabitze	27	https://cd	Austria	https://cd	84	85	FC Bayern	https://cd	€48M	€130K	2229	Right	3	3	3	High/ Higl	Normal (1	Yes	<span clas		18 Aug 30, 20	nan	2025	179cm	76kg	74	71	60	84
193082	J. Cuadrad	33	https://cd	Colombia	https://cd	83	83	Juventus	https://cd	€19M	€95K	2229	Right	3	3	5	High/ Mec	Lean (170	Yes	<span clas		11 Feb 2, 201	nan	2022	179cm	72kg	84	70	67	81
193747	Koke	29	https://cd	Spain	https://cd	85	85	Atlético	https://cd	€52.5M	€90K	2227	Right	3	4	4	Medium/ l	Normal (1	Yes	<span clas		6 Jan 1, 201	nan	2024	176cm	75kg	85	72	61	86
210514	João Can	27	https://cd	Portugal	https://cd	86	87	Manchest	https://cd	€71.5M	€185K	2227	Right	3	4	4	High/ Mec	Unique	Yes	<span clas		27 Aug 7, 201	nan	2025	178cm	74kg	86	68	72	85
200458	L. Digne	27	https://cd	France	https://cd	84	84	Everton	https://cd	€40.5M	€110K	2227	Left	2	2	3	High/ Mec	Unique	Yes	<span clas		12 Aug 1, 201	nan	2023	178cm	74kg	88	60	71	81
200574	F. Kostić	28	https://cd	Serbia	https://cd	84	84	Eintracht l	https://cd	€42.5M	€52K	2227	Left	3	2	3	High/ Higl	Normal (1	Yes	<span clas		10 May 17, 2	nan	2023	184cm	82kg	91	75	59	80
231281	T. Alexanc	22	https://cd	England	https://cd	87	92	Liverpool	https://cd	€114M	€150K	2227	Right	3	4	3	High/ Mec	Normal (1	Yes	<span clas		66 Oct 7, 201	nan	2025	180cm	69kg	92	60	69	86
223848	S. Milinkov	26	https://cd	Serbia	https://cd	85	87	Lazio	https://cd	€66M	€100K	2224	Right	3	5	4	High/ Mec	Normal (1	Yes	<span clas		21 Aug 6, 201	nan	2024	191cm	76kg	64	80	86	85
181872	A. Vidal	34	https://cd	Chile	https://cd	81	81	Inter	https://cd	€12M	€105K	2224	Right	4	4	3	High/ Higl	Unique	Yes	<span clas		22 Sep 22, 20	nan	2022	180cm	75kg	76	75	81	81
195864	P. Pogba	28	https://cd	France	https://cd	87	87	Manchest	https://cd	€79.5M	€290K	2222	Right	4	4	5	High/ Mec	Unique	Yes	<span clas		6 Aug 9, 201	nan	2022	191cm	84kg	77	75	74	88
200145	Casemiro	29	https://cd	Brazil	https://cd	89	89	Real Madr	https://cd	€88M	€310K	2219	Right	3	3	2	High/ Higl	Unique	Yes	<span clas		14 Jul 11, 201	nan	2025	185cm	84kg	58	64	79	84
158023	L. Messi	34	https://cd	Argentina	https://cd	93	93	Paris Saint	https://cd	€78M	€320K	2219	Left	5	4	4	Medium/ l	Unique	Yes	<span clas		30 Aug 10, 2(	nan	2023	170cm	72kg	85	95	70	91
230767	Renato Sa	23	https://cd	Portugal	https://cd	80	86	LOSC Lille	https://cd	€33M	€38K	2218	Right	3	4	4	High/ Higl	Normal (1	Yes	<span clas		18 Aug 23, 2(	nan	2023	176cm	70kg	72	67	61	81

146530	19Å Dani /	35	https://cd	Brazil	https://cd	82	82	Paris Saint	https://cd	€4.8M	€60K	2205	Right	4	3	4	High/ Mec	Normal (1	Yes	<span clas		13 Jul 12, 20	nan	2019	172cm	68kg	85	61	71	83
216352	M. Brozov	28	https://cd	Croatia	https://cd	84	84	Inter	https://cd	€37M	€100K	2203	Right	3	4	3	Medium/ l	Lean (170	Yes	<span clas		77 Jul 1, 201	nan	2022	181cm	68kg	72	69	70	85
199556	M. Verrat	28	https://cd	Italy	https://cd	87	87	Paris Saint	https://cd	€79.5M	€155K	2202	Right	3	4	4	Medium/ l	Unique	Yes	<span clas		6 Jul 18, 201	nan	2024	165cm	60kg	82	60	57	90
208421	Saúl	26	https://cd	Spain	https://cd	82	85	Chelsea	https://cd	€62.5M	€68K	2199	Left	3	4	3	Medium/ l	Lean (170	Yes	<span clas		17 nan	<a href="/	Jun 30, 20	183cm	75kg	69	76	83	84
189509	Thiago	30	https://cd	Spain	https://cd	86	86	Liverpool	https://cd	€65M	€180K	2199	Right	3	3	5	Medium/ l	Normal (1	Yes	<span clas		6 Sep 18, 20	nan	2024	174cm	70kg	78	68	54	90
201519	J. Veretou	28	https://cd	France	https://cd	82	83	Roma	https://cd	€29.5M	€66K	2198	Right	2	3	3	Medium/ l	Normal (1	Yes	<span clas		17 Jul 20, 201	nan	2024	177cm	67kg	69	69	59	85
183711	J. Henders	31	https://cd	England	https://cd	84	84	Liverpool	https://cd	€26.5M	€270K	2198	Right	3	3	3	High/ Higl	Normal (1	Yes	<span clas		14 Jun 9, 201	nan	2025	182cm	80kg	82	73	65	85
186942	İ. Gündo	30	https://cd	Germany	https://cd	85	85	Manchest	https://cd	€51.5M	€185K	2198	Right	3	4	4	High/ Mec	Normal (1	Yes	<span clas		8 Jul 1, 201	nan	2023	180cm	80kg	78	80	50	88
201399	R. Naingg	33	https://cd	Belgium	https://cd	80	80	Royal Ant	https://cd	€13M	€29K	2197	Right	3	3	3	High/ Mec	Unique	Yes	<span clas		4 Aug 14, 201	nan	2023	176cm	65kg	73	80	59	82
193283	T. Delaney	29	https://cd	Denmark	https://cd	81	81	Sevilla FC	https://cd	€22M	€34K	2197	Left	2	4	3	Low/ High	Normal (1	Yes	<span clas		18 Aug 25, 2(	nan	2025	182cm	79kg	68	68	83	76
233927	Lucas Paqu	23	https://cd	Brazil	https://cd	81	85	Olympique	https://cd	€37M	€48K	2196	Left	2	3	4	High/ Higl	Normal (1	Yes	<span clas		10 Oct 1, 202	nan	2025	180cm	72kg	74	78	60	82
230938	F. Kessié	24	https://cd	Cô te d'Ivi	https://cd	84	86	AC Milan	https://cd	€49.5M	€51K	2196	Right	3	4	3	High/ Higl	Normal (1	Yes	<span clas		79 Jul 1, 2015	nan	2022	183cm	88kg	66	67	68	83
231969	R. Malinov	25	https://cd	Ukraine	https://cd	81	81	Atalanta	https://cd	€26.5M	€68K	2195	Left	3	4	4	Medium/ l	Unique	No	<span clas		18 Jul 16, 201	nan	2023	181cm	79kg	79	73	74	85
188377	K. Walker	31	https://cd	England	https://cd	85	85	Manchest	https://cd	€35M	€170K	2194	Right	3	2	3	High/ Higl	Unique	Yes	<span clas		2 Jul 14, 201	nan	2024	183cm	83kg	77	51	74	79
223697	R. Gosens	26	https://cd	Germany	https://cd	83	83	Atalanta	https://cd	€36M	€65K	2192	Left	3	3	3	High/ Mec	Normal (1	No	<span clas		8 Jul 1, 2017	nan	2023	183cm	76kg	62	79	82	80
208722	S. Mané	29	https://cd	Senegal	https://cd	89	89	Liverpool	https://cd	€101M	€270K	2192	Right	4	4	4	High/ Mec	Unique	Yes	<span clas		10 Jul 1, 201	nan	2023	175cm	69kg	78	86	84	84
228251	L. Pellegrii	25	https://cd	Italy	https://cd	81	86	Roma	https://cd	€38M	€61K	2190	Right	2	3	3	Medium/ l	Lean (185	Yes	<span clas		7 Jul 1, 201	nan	2022	186cm	77kg	74	72	71	86
172522	D. Wass	32	https://cd	Denmark	https://cd	80	80	Valencia C	https://cd	€16.5M	€42K	2189	Right	2	3	3	Medium/ l	Normal (1	Yes	<span clas		18 Jul 10, 201	nan	2022	181cm	74kg	79	76	69	80
235212	A. Hakimi	22	https://cd	Morocco	https://cd	85	88	Paris Saint	https://cd	€69.5M	€100K	2188	Right	2	4	3	High/ Mec	Lean (170	Yes	<span clas		2 Jul 6, 2021	nan	2026	181cm	73kg	86	73	68	81
216393	Y. Tielema	24	https://cd	Belgium	https://cd	84	87	Leicester C	https://cd	€57M	€125K	2187	Right	2	5	4	Medium/ l	Normal (1	Yes	<span clas		8 Jul 8, 2015	nan	2023	176cm	72kg	82	74	67	89
210243	Ricardo Pe	27	https://cd	Portugal	https://cd	84	84	Leicester C	https://cd	€40.5M	€130K	2186	Right	3	4	3	High/ Higl	Unique	Yes	<span clas		21 Jun 9, 201	nan	2023	175cm	70kg	82	66	67	82
232656	T. Hernán	23	https://cd	France	https://cd	84	84	AC Milan	https://cd	€62.5M	€51K	2185	Left	3	3	4	Medium/ l	Unique	Yes	<span clas		19 Jul 5, 2015	nan	2024	184cm	81kg	64	68	79	84
210035	Grimaldo	25	https://cd	Spain	https://cd	85	85	SL Benfica	https://cd	€37M	€18K	2184	Left	3	2	3	High/ Mec	Normal (1	No	<span clas		3 Jan 4, 201	nan	2023	171cm	66kg	82	52	66	83
169195	21Å Renat	32	https://cd	Brazil	https://cd	83	83	Beijing Gu	https://cd	€28.5M	€33K	2183	Right	2	4	4	High/ Higl	Normal (1	No	<span clas		5 Jan 8, 201	nan	2021	186cm	86kg	75	78	65	85
190871	Neymar Jr	29	https://cd	Brazil	https://cd	91	91	Paris Saint	https://cd	€129M	€270K	2183	Right	5	5	5	High/ Mec	Unique	Yes	<span clas		10 Aug 3, 201	nan	2025	175cm	68kg	85	83	63	86
186345	K. Trippier	30	https://cd	England	https://cd	84	84	Atlético	https://cd	€36.5M	€74K	2183	Right	2	4	3	Medium/ l	Normal (1	Yes	<span clas		23 Jul 17, 201	nan	2023	173cm	69kg	86	54	79	81
240699	N. De la C	24	https://cd	Uruguay	https://cd	78	84	River Plate	https://cd	€22M	€17K	2182	Right	1	4	4	High/ Higl	Normal (1	No	<span clas		11 Aug 15, 2(	nan	2022	167cm	65kg	72	73	69	84
3647	12Å M. Ba	34	https://cd	Germany	https://cd	80	80	Bayer 04 l	https://cd	€3.2M	€30K	2181	Right	3	4	3	Medium/ l	Normal (1	Yes	<span clas		13 Jan 1, 201	nan	2012	189cm	88kg	73	75	90	83
201942	Roberto Fi	29	https://cd	Brazil	https://cd	85	85	Liverpool	https://cd	€54M	€180K	2180	Right	3	4	5	High/ Higl	Unique	Yes	<span clas		9 Jul 6, 2015	nan	2023	181cm	76kg	73	78	78	84
173210	19Å C. Ma	31	https://cd	Italy	https://cd	83	84	Juventus	https://cd	€19.5M	€130K	2179	Right	3	4	3	High/ Higl	Normal (1	Yes	<span clas		8 Jul 1, 200	nan	2020	180cm	74kg	76	56	64	85
212616	R. De Paul	27	https://cd	Argentina	https://cd	82	83	Atlético	https://cd	€68M	€130K	2179	Right	3	4	4	High/ Higl	Normal (1	No	<span clas		5 Jul 12, 201	nan	2026	180cm	70kg	69	76	50	85
215914	N. Kanté	30	https://cd	France	https://cd	90	90	Chelsea	https://cd	€100M	€230K	2179	Right	4	3	2	Medium/ l	Unique	Yes	<span clas		7 Jul 16, 201	nan	2023	168cm	70kg	68	65	54	82

```python
[6]: import pandas as pd
     import numpy as np

     df = pd.read_csv('FIFA22_official_data.csv')
     print(df)
```

```
              ID                Name  Age  \
0         212198     Bruno Fernandes   26
1         209658         L. Goretzka   26
2         176580          L. Suárez   34
3         192985       K. De Bruyne   30
4         224334          M. Acuña   29
...          ...                ...  ...
16705     240558     18 L. Clayton   17
16706     262846          �. Dobre   20
16707     241317     21 Xue Qinghao  19
16708     259646          A. Shaikh   18
16709     178453        07 A. Censori  17


                                               Photo Nationality  \
0      https://cdn.sofifa.com/players/212/198/22_60.png    Portugal
1      https://cdn.sofifa.com/players/209/658/22_60.png     Germany
```

```python
[7]: # 1. Display the number of rows and columns in the dataset
     df.shape
```

```
[7]: (16710, 65)
```

```python
[8]: # 2. Show the first 5 rows of the dataset
     df.head()
```

[8]:

	ID	Name	Age	Photo	Nationality	Flag	Overall	Potential	Club	
0	212198	Bruno Fernandes	26	https://cdn.sofifa.com/players/212/198/22_60.png	Portugal	https://cdn.sofifa.com/flags/pt.png	88	89	Manchester United	https://cdn.sofifa.c
1	209658	L. Goretzka	26	https://cdn.sofifa.com/players/209/658/22_60.png	Germany	https://cdn.sofifa.com/flags/de.png	87	88	FC Bayern München	https://cdn.sofifa.c
2	176580	L. Suárez	34	https://cdn.sofifa.com/players/176/580/22_60.png	Uruguay	https://cdn.sofifa.com/flags/uy.png	88	88	Atlético de Madrid	https://cdn.sofifa.cc
3	192985	K. De Bruyne	30	https://cdn.sofifa.com/players/192/985/22_60.png	Belgium	https://cdn.sofifa.com/flags/be.png	91	91	Manchester City	https://cdn.sofifa.c
4	224334	M. Acuña	29	https://cdn.sofifa.com/players/224/334/22_60.png	Argentina	https://cdn.sofifa.com/flags/ar.png	84	84	Sevilla FC	https://cdn.sofifa.cc

5 rows × 65 columns

```python
[9]: # 3. Get basic information about the dataset (column types, nulls)
     df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 16710 entries, 0 to 16709
Data columns (total 65 columns):
 #   Column                  Non-Null Count  Dtype
---  ------                  --------------  -----
 0   ID                      16710 non-null  int64
 1   Name                    16710 non-null  object
 2   Age                     16710 non-null  int64
 3   Photo                   16710 non-null  object
 4   Nationality             16710 non-null  object
 5   Flag                    16710 non-null  object
 6   Overall                 16710 non-null  int64
 7   Potential               16710 non-null  int64
 8   Club                    16446 non-null  object
 9   Club Logo               16710 non-null  object
 10  Value                   16710 non-null  object
 11  Wage                    16710 non-null  object
 12  Special                 16710 non-null  int64
 13  Preferred Foot          16710 non-null  object
 14  International Reputation 16710 non-null  float64
 15  Weak Foot               16710 non-null  float64
```

```python
[10]:  # 4. Find the number of missing values in each column
       df.isnull().sum()
```

```
[10]:  ID                      0
       Name                    0
       Age                     0
       Photo                   0
       Nationality             0
                             ...
       GKReflexes              0
       Best Position           0
       Best Overall Rating     0
       Release Clause       1749
       DefensiveAwareness    892
       Length: 65, dtype: int64
```

```python
[11]:  # 5. Get the list of unique nationalities in the dataset
       df['Nationality'].unique()
```

```
[11]:  array(['Portugal', 'Germany', 'Uruguay', 'Belgium', 'Argentina', 'Brazil',
              'Netherlands', 'France', 'Croatia', 'Spain', 'Austria', 'Italy',
              'Colombia', 'Serbia', 'England', 'Chile', 'Poland', 'Egypt',
              'Denmark', "Côte d'Ivoire", 'Ukraine', 'Senegal', 'Morocco',
              'Wales', 'Ecuador', 'Mexico', 'Scotland', 'Ghana',
              'Czech Republic', 'Peru', 'Algeria', 'United States',
              'Bosnia and Herzegovina', 'Armenia', 'Korea Republic', 'Russia',
              'Slovakia', 'Central African Republic', 'Turkey',
              'North Macedonia', 'Romania', 'Jamaica', 'Canada', 'Nigeria',
              'Guinea', 'Switzerland', 'Mali', 'China PR', 'Norway', 'Sweden',
              'Zambia', 'Republic of Ireland', 'Australia', 'Benin', 'Israel',
              'Gabon', 'Angola', 'Montenegro', 'Paraguay', 'Iraq', 'Slovenia',
              'Cameroon', 'Iceland', 'Finland', 'Greece', 'Liberia', 'Congo DR',
              'Venezuela', 'Kosovo', 'Japan', 'Moldova', 'Honduras', 'Tunisia',
              'Bulgaria', 'Uzbekistan', 'Suriname', 'Curacao', 'Albania',
              'Hungary', 'Guinea Bissau', 'Costa Rica', 'Northern Ireland',
              'Fiji', 'Burkina Faso', 'Cape Verde Islands', 'Saudi Arabia',
              'Iran', 'Comoros', 'Dominican Republic', 'Kenya', 'Panama',
              'New Zealand', 'South Africa', 'Georgia', 'Zimbabwe', 'Madagascar',
              'Cyprus', 'Malta', 'Chinese Taipei', 'Syria', 'Mozambique', 'Cuba',
              'Equatorial Guinea', 'Kazakhstan', 'Congo', 'Burundi', 'Grenada'
```

```python
[12]:  # 6. Count how many players are from Argentina
       df[df['Nationality'] == 'Argentina'].shape[0]
```

```
[12]:  846
```

```python
[13]:  # 7. Find the average age of all players
       df['Age'].mean()
```

```
[13]:  np.float64(25.727408737283064)
```

```python
[14]:  # 8. Get the maximum and minimum overall ratings
       df['Overall'].max(), df['Overall'].min()
```

```
[14]:  (np.int64(93), np.int64(28))
```

```python
[15]:  # 9. Find the player(s) with the highest overall rating
       df[df['Overall'] == df['Overall'].max()][['Name', 'Overall']]
```

```
[15]:        Name   Overall
       29   L. Messi      93
```

```python
[16]:  # 10. List top 5 clubs with the most players
       df['Club'].value_counts().head(5)
```

```
[16]:  Club
       AC Milan               47
       Lazio                  45
       FC Lokomotiv Moscow    42
       Cádiz CF               42
       Inter                  42
       Name: count, dtype: int64
```

```python
# 11. Find the average potential of players from Brazil
df[df['Nationality'] == 'Brazil']['Potential'].mean()
```

```
np.float64(74.91086691086691)
```

```python
# 12. Find how many Left-footed players are in the dataset
df[df['Preferred Foot'] == 'Left'].shape[0]
```

```
4097
```

```python
# 13. Count players whose wage is more than €100K (strip € and K/M first)
df['Wage_EUR'] = df['Wage'].str.replace('€', '').str.replace('K', 'e3').str.replace('M', 'e6').map(eval)
df[df['Wage_EUR'] > 100000].shape[0]
```

```
161
```

```python
# 14. Find top 5 players with the highest shooting skill
df[['Name', 'Finishing']].sort_values(by='Finishing', ascending=False).head(5)
```

	Name	Finishing
33	R. Lewandowski	95.0
	L. Messi	95.0
36	Cristiano Ronaldo	95.0
251	E. Haaland	94.0
39	H. Kane	94.0

```python
# 15. List the number of players in each age group (use value_counts)
df['Age'].value_counts().sort_index()
```

```
Age
16      32
17     269
18     616
19     879
20    1023
21    1217
22    1159
23    1118
24    1208
25    1123
26    1028
27    1022
28     973
29     971
30     843
31     760
32     629
33     545
34     446
```

```python
# 16. Get average strength by nationality (top 5 only)
df.groupby('Nationality')['Strength'].mean().sort_values(ascending=False).head(5)
```

```
Nationality
Central African Republic    86.333333
Lebanon                     85.000000
New Caledonia               84.000000
Namibia                     83.000000
Eritrea                     82.000000
Name: Strength, dtype: float64
```

```python
# 17. Check how many unique clubs are in the dataset
df['Club'].nunique()
```

```
869
```

```
[24]: # 18. Find all players whose name starts with 'L'
      df[df['Name'].str.startswith('L')][['Name']]
```

[24]:

	Name
1	L. Goretzka
2	L. Suárez
10	L. Modrić
22	L. Digne
29	L. Messi
...	...
16628	L. Bergström
16637	L. Margueron
16649	L. Hornicek
16676	L. Philipp
16677	L. Ashby-Hammond

```
[27]: # 19. Find players who play for FC Barcelona
      df[df['Club'] == 'FC Barcelona'][['Name', 'Club']]
```

[27]:

	Name	Club
17	F. de Jong	FC Barcelona
32	Jordi Alba	FC Barcelona
244	15 Xavi	FC Barcelona
317	Coutinho	FC Barcelona
340	M. Depay	FC Barcelona
390	Sergi Roberto	FC Barcelona
396	S. Agüero	FC Barcelona
703	Pedri	FC Barcelona
731	S. Umtiti	FC Barcelona
804	Sergio Busquets	FC Barcelona
1026	O. Dembélé	FC Barcelona

```
[28]: # 20. Count players with jersey number 10
      (df['Jersey Number'] == 10).sum()
```

[28]: np.int64(644)