

```
In [1]: import pandas as pd
```

```
In [2]: df=pd.read_csv("CricketTestMatchData.csv",encoding="utf-8")
df.head()
```

Out[2]:

	Player	Span	Mat	Inns	NO	Runs	HS	Ave	BF	SR	100	50	0	4s	6s
0	DG Bradman (AUS)	1928- 1948	52	80	10	6996	334	99.94	9800+	58.60	29	13	7	626+	6
1	HC Brook (ENG)	2022- 2023	12	20	1	1181	186	62.15	1287	91.76	4	7	1	141	23
2	AC Voges (AUS)	2015- 2016	20	31	7	1485	269*	61.87	2667	55.68	5	4	2	186	5
3	RG Pollock (SA)	1963- 1970	23	41	4	2256	274	60.97	1707+	54.48	7	11	1	246+	11
4	GA Headley (WI)	1930- 1954	22	40	4	2190	270*	60.83	416+	56.00	10	5	2	104+	1

```
In [3]: df.columns
```

```
Out[3]: Index(['Player', 'Span', 'Mat', 'Inns', 'NO', 'Runs', 'HS', 'Ave', 'BF',  
              'SR',  
              '100', '50', '0', '4s', '6s'],  
              dtype='object')
```

Rename multiple columns in list

```
In [4]: df.rename(columns={'Mat': 'Matches', 'NO': 'Not_Outs', 'HS': 'Highest_Inns_Score
```

Out[4]:

	Player	Span	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced
0	DG Bradman (AUS)	1928-1948	52	80	10	6996	334	99.94	9800+
1	HC Brook (ENG)	2022-2023	12	20	1	1181	186	62.15	1287
2	AC Voges (AUS)	2015-2016	20	31	7	1485	269*	61.87	2667
3	RG Pollock (SA)	1963-1970	23	41	4	2256	274	60.97	1707+
4	GA Headley (WI)	1930-1954	22	40	4	2190	270*	60.83	416+
...
62	GC Smith (ICC/SA)	2002-2014	117	205	13	9265	277	48.25	15525
63	WH Ponsford (AUS)	1924-1934	29	48	4	2122	266	48.22	3118+
64	SJ McCabe (AUS)	1930-1938	39	62	5	2748	232	48.21	3217+
65	DR Jardine (ENG)	1928-1934	22	33	6	1296	127	48.00	2110+
66	V Kohli (IND)	2011-2023	111	187	11	8676	254*	49.29	15708

67 rows × 15 columns

In [5]: `df.head()`

Out[5]:

	Player	Span	Mat	Inns	NO	Runs	HS	Ave	BF	SR	100	50	0	4s	6s
0	DG Bradman (AUS)	1928-1948	52	80	10	6996	334	99.94	9800+	58.60	29	13	7	626+	6
1	HC Brook (ENG)	2022-2023	12	20	1	1181	186	62.15	1287	91.76	4	7	1	141	23
2	AC Voges (AUS)	2015-2016	20	31	7	1485	269*	61.87	2667	55.68	5	4	2	186	5
3	RG Pollock (SA)	1963-1970	23	41	4	2256	274	60.97	1707+	54.48	7	11	1	246+	11
4	GA Headley (WI)	1930-1954	22	40	4	2190	270*	60.83	416+	56.00	10	5	2	104+	1

In [6]: `#rename multiple columns in list`
`df=df.rename(columns={'Mat':'Matches','NO':'Not_Outs','HS':'Highest_Inns_Sc`
`df.head()`

Out[6]:

	Player	Span	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced
0	DG Bradman (AUS)	1928-1948	52	80	10	6996	334	99.94	9800+
1	HC Brook (ENG)	2022-2023	12	20	1	1181	186	62.15	1287
2	AC Voges (AUS)	2015-2016	20	31	7	1485	269*	61.87	2667
3	RG Pollock (SA)	1963-1970	23	41	4	2256	274	60.97	1707+
4	GA Headley (WI)	1930-1954	22	40	4	2190	270*	60.83	416+

Check null values

- `df.isnull()` creates a DataFrame of the same shape as `df`, where each cell contains a boolean value indicating whether the corresponding cell in `df` is null (True) or not null (False).
- `.any()` is called on the resulting DataFrame to check if there are any True values in each column.

```
In [7]: df.isnull().any()
```

```
Out[7]: Player          False
      Span              False
      Matches           False
      Inns              False
      Not_Outs          False
      Runs              False
      Highest_Inns_Score False
      Ave               False
      Balls_Faced       True
      Batting_Strike_Rate True
      100               False
      50                False
      0                 False
      4s                False
      6s                False
      dtype: bool
```

```
In [8]: pd.set_option('display.max_rows', None)
```

`df['Balls_Faced'].isna() == 0` further compares each element in the resulting Boolean Series to 0, which essentially checks if the corresponding element in the 'Balls_Faced' column is not missing. If it's not missing, it will be True (since 0 is equivalent to False in a Boolean context), and if it's missing, it will be False (since 1 is equivalent to True in a Boolean context).

```
In [9]: df['Balls_Faced'].isna()==1
```

```
Out[9]: 0      False
        1      False
        2      False
        3      False
        4      False
        5      False
        6      False
        7      False
        8       True
        9      False
       10      False
       11      False
       12      False
       13      False
       14      False
       15      False
       16       True
       17      False
       18      False
       19      False
       20      False
       21      False
       22      False
       23      False
       24      False
       25      False
       26      False
       27      False
       28      False
       29      False
       30      False
       31      False
       32      False
       33      False
       34      False
       35      False
       36      False
       37      False
       38      False
       39      False
       40      False
       41      False
       42      False
       43      False
       44      False
       45      False
       46      False
       47      False
       48      False
       49      False
       50      False
       51      False
       52      False
       53      False
       54      False
       55      False
       56      False
       57      False
       58       True
       59      False
       60      False
```

```

61    False
62    False
63    False
64    False
65    False
66    False
Name: Balls_Faced, dtype: bool

```

```
In [70]: df[df['Balls_Faced'].isna()==1]
```

```
Out[70]:
```

	Player	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced	Battin
8	ED Weekes	48	81	5	4455	207	58.61	NaN	
16	CL Walcott	44	74	7	3798	220	56.68	NaN	
58	Hon.FS Jackson	20	33	4	1415	144	48.79	NaN	



```
In [73]: df['Balls_Faced']=df['Balls_Faced'].fillna(0)
```

```
In [74]: df.loc[8]
```

```

Out[74]: Player          ED Weekes
Matches                48
Inns                   81
Not_Outs                5
Runs                  4455
Highest_Inns_Score     207
Ave                   58.61
Balls_Faced            0
Batting_Strike_Rate     0.0
100                    15
50                      19
0                       6
4s                    258+
6s                      2
Start_Year             1948
End_Year                1958
Country                WI
Name: 8, dtype: object

```

```
In [13]: df['Balls_Faced']=df['Balls_Faced'].fillna(0)
df.loc[8]
```

```
Out[13]: Player          ED Weekes (WI)
Span          1948-1958
Matches          48
Inns            81
Not_Outs         5
Runs           4455
Highest_Inns_Score 207
Ave            58.61
Balls_Faced      0
Batting_Strike_Rate NaN
100            15
50             19
0              6
4s            258+
6s              2
Name: 8, dtype: object
```

```
In [14]: df['Batting_Strike_Rate']=df['Batting_Strike_Rate'].fillna(0)
```

```
In [15]: df[df['Player']=='ED Weekes (WI)']
```

```
Out[15]:
```

	Player	Span	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced
8	ED Weekes (WI)	1948-1958	48	81	5	4455	207	58.61	0

Drop duplicates


```
In [16]: df.duplicated()
```

```
Out[16]: 0    False
          1    False
          2    False
          3    False
          4    False
          5    False
          6    False
          7    False
          8    False
          9    False
         10    False
         11    False
         12     True
         13    False
         14    False
         15    False
         16    False
         17    False
         18    False
         19    False
         20    False
         21    False
         22    False
         23    False
         24    False
         25    False
         26    False
         27    False
         28    False
         29     True
         30    False
         31    False
         32    False
         33    False
         34    False
         35    False
         36    False
         37    False
         38    False
         39    False
         40    False
         41    False
         42    False
         43    False
         44    False
         45    False
         46    False
         47    False
         48    False
         49    False
         50    False
         51    False
         52    False
         53    False
         54    False
         55    False
         56    False
         57    False
         58    False
         59    False
         60    False
```

```

61     False
62     False
63     False
64     False
65     False
66     True
dtype: bool

```

```
In [17]: df[df['Player'].duplicated()==1]
```

Out[17]:

	Player	Span	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced
12	GS Sobers (WI)	1954- 1974	93	160	21	8032	365*	57.78	4063+
29	Javed Miandad (PAK)	1976- 1993	124	189	21	8832	280*	52.57	15164+
66	V Kohli (IND)	2011- 2023	111	187	11	8676	254*	49.29	15708

```
In [18]: df[df['Player']=='Javed Miandad (PAK)']
```

Out[18]:

	Player	Span	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced
28	Javed Miandad (PAK)	1976- 1993	124	189	21	8832	280*	52.57	15164+
29	Javed Miandad (PAK)	1976- 1993	124	189	21	8832	280*	52.57	15164+

```
In [19]: df[df['Player'].isin(['GS Sobers (WI)', 'Javed Miandad (PAK)', 'V Kohli (IND)'])
```

Out[19]:

	Player	Span	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced
11	GS Sobers (WI)	1954- 1974	93	160	21	8032	365*	57.78	4063+
12	GS Sobers (WI)	1954- 1974	93	160	21	8032	365*	57.78	4063+
28	Javed Miandad (PAK)	1976- 1993	124	189	21	8832	280*	52.57	15164+
29	Javed Miandad (PAK)	1976- 1993	124	189	21	8832	280*	52.57	15164+
53	V Kohli (IND)	2011- 2023	111	187	11	8676	254*	49.29	15708
66	V Kohli (IND)	2011- 2023	111	187	11	8676	254*	49.29	15708

```
In [20]: df.shape[0]-1
```


```
Out[20]: 66
```

```
In [21]: df=df.drop_duplicates()
```

```
In [22]: df[df['Player'].isin(['GS Sobers (WI)', 'Javed Miandad (PAK)', 'V Kohli (IND)'])
```

```
Out[22]:
```

	Player	Span	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced
11	GS Sobers (WI)	1954-1974	93	160	21	8032	365*	57.78	4063+
28	Javed Miandad (PAK)	1976-1993	124	189	21	8832	280*	52.57	15164+
53	V Kohli (IND)	2011-2023	111	187	11	8676	254*	49.29	15708



Split up span into start and end date

```
In [23]: "ayesha_khan".split('_')
```

```
Out[23]: ['ayesha', 'khan']
```

```
In [24]: df['Span'].str.split(pat='-')
```

```
Out[24]: 0    [1928, 1948]
         1    [2022, 2023]
         2    [2015, 2016]
         3    [1963, 1970]
         4    [1930, 1954]
         5    [1924, 1935]
         6    [1931, 1939]
         7    [1955, 1968]
         8    [1948, 1958]
         9    [2010, 2023]
        10    [1927, 1947]
        11    [1954, 1974]
        13    [2000, 2015]
        14    [2019, 2023]
        15    [1908, 1930]
        16    [1948, 1960]
        17    [1937, 1955]
        18    [1995, 2013]
        19    [1921, 1929]
        20    [2010, 2023]
        21    [1968, 1973]
        22    [1993, 1995]
        23    [1970, 1984]
        24    [1935, 1951]
        25    [1989, 2013]
        26    [2018, 2023]
        27    [1990, 2006]
        28    [1976, 1993]
        30    [1996, 2012]
        31    [1998, 2010]
        32    [2000, 2017]
        33    [1995, 2012]
        34    [1920, 1929]
        35    [1992, 2002]
        36    [2005, 2013]
        37    [1994, 2015]
        38    [1971, 1987]
        39    [1985, 2004]
        40    [2021, 2023]
        41    [1994, 2009]
        42    [2004, 2018]
        43    [1978, 1994]
        44    [2012, 2023]
        45    [1974, 1991]
        46    [2021, 2023]
        47    [1937, 1957]
        48    [1997, 2014]
        49    [1992, 2007]
        50    [1948, 1963]
        51    [1911, 1928]
        52    [2001, 2013]
        53    [2011, 2023]
        54    [2019, 2021]
        55    [2004, 2015]
        56    [1961, 1966]
        57    [1929, 1949]
        58    [1893, 1905]
        59    [2001, 2013]
        60    [1948, 1963]
        61    [1965, 1981]
        62    [2002, 2014]
```

```

63    [1924, 1934]
64    [1930, 1938]
65    [1928, 1934]
Name: Span, dtype: object

```

```
In [27]: pd.reset_option('display.max_rows')
```

```
In [28]: df['Start_Year']=df['Span'].str.split(pat='-').str[0]
df['Start_Year']
```

```

Out[28]: 0      1928
         1      2022
         2      2015
         3      1963
         4      1930
         ...
        61      1965
        62      2002
        63      1924
        64      1930
        65      1928
Name: Start_Year, Length: 64, dtype: object

```

```
In [31]: df['End_Year']=df['Span'].str.split(pat='-').str[1]
df['End_Year']
```

```

Out[31]: 0      1948
         1      2023
         2      2016
         3      1970
         4      1954
         ...
        61      1981
        62      2014
        63      1934
        64      1938
        65      1934
Name: End_Year, Length: 64, dtype: object

```

```
In [32]: df.head(3)
```

```

Out[32]:

```

	Player	Span	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced
0	DG Bradman (AUS)	1928- 1948	52	80	10	6996	334	99.94	9800+
1	HC Brook (ENG)	2022- 2023	12	20	1	1181	186	62.15	1287
2	AC Voges (AUS)	2015- 2016	20	31	7	1485	269*	61.87	2667

```
In [33]: df.drop(['Span'])
```

-
KeyError

Traceback (most recent call last)

t)

Input In [33], in <cell line: 1>()

----> 1 df.drop(['Span'])

File ~\anaconda3\lib\site-packages\pandas\util_decorators.py:311, in deprecate_nonkeyword_arguments.<locals>.decorate.<locals>.wrapper(*args, **kwargs)

```
305 if len(args) > num_allow_args:
306     warnings.warn(
307         msg.format(arguments=arguments),
308         FutureWarning,
309         stacklevel=stacklevel,
310     )
--> 311 return func(*args, **kwargs)
```

File ~\anaconda3\lib\site-packages\pandas\core\frame.py:4954, in DataFrame.drop(self, labels, axis, index, columns, level, inplace, errors)

```
4806 @deprecate_nonkeyword_arguments(version=None, allowed_args=["self", "labels"])
4807 def drop(
4808     self,
4809     (...)
4815     errors: str = "raise",
4816 ):
4817     """
4818     Drop specified labels from rows or columns.
4819     (...)
4952         weight 1.0      0.8
4953     """
-> 4954     return super().drop(
4955         labels=labels,
4956         axis=axis,
4957         index=index,
4958         columns=columns,
4959         level=level,
4960         inplace=inplace,
4961         errors=errors,
4962     )
```

File ~\anaconda3\lib\site-packages\pandas\core\generic.py:4267, in NDFrame.drop(self, labels, axis, index, columns, level, inplace, errors)

```
4265 for axis, labels in axes.items():
4266     if labels is not None:
-> 4267         obj = obj._drop_axis(labels, axis, level=level, errors=errors)
4269 if inplace:
4270     self._update_inplace(obj)
```

File ~\anaconda3\lib\site-packages\pandas\core\generic.py:4311, in NDFrame._drop_axis(self, labels, axis, level, errors, consolidate, only_slice)

```
4309     new_axis = axis.drop(labels, level=level, errors=errors)
4310     else:
-> 4311         new_axis = axis.drop(labels, errors=errors)
4312     indexer = axis.get_indexer(new_axis)
4314 # Case for non-unique axis
4315 else:
```

File ~\anaconda3\lib\site-packages\pandas\core\indexes\base.py:6644, in In
dex.drop(self, labels, errors)

```

6642 if mask.any():
6643     if errors != "ignore":
-> 6644         raise KeyError(f"{list(labels[mask])} not found in axis")
6645     indexer = indexer[~mask]
6646 return self.delete(indexer)

```

KeyError: "['Span'] not found in axis"

In [34]: df.drop(['Span'],axis=1)

Out[34]:

	Player	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced	Battir
0	DG Bradman (AUS)	52	80	10	6996	334	99.94	9800+	
1	HC Brook (ENG)	12	20	1	1181	186	62.15	1287	
2	AC Voges (AUS)	20	31	7	1485	269*	61.87	2667	
3	RG Pollock (SA)	23	41	4	2256	274	60.97	1707+	
4	GA Headley (WI)	22	40	4	2190	270*	60.83	416+	
...	
61	KD Walters (AUS)	74	125	14	5357	250	48.26	8662+	
62	GC Smith (ICC/SA)	117	205	13	9265	277	48.25	15525	
63	WH Ponsford (AUS)	29	48	4	2122	266	48.22	3118+	
64	SJ McCabe (AUS)	39	62	5	2748	232	48.21	3217+	
65	DR Jardine (ENG)	22	33	6	1296	127	48.00	2110+	

64 rows × 16 columns



In [35]: `df.head()`

Out[35]:

	Player	Span	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced
0	DG Bradman (AUS)	1928-1948	52	80	10	6996	334	99.94	9800+
1	HC Brook (ENG)	2022-2023	12	20	1	1181	186	62.15	1287
2	AC Voges (AUS)	2015-2016	20	31	7	1485	269*	61.87	2667
3	RG Pollock (SA)	1963-1970	23	41	4	2256	274	60.97	1707+
4	GA Headley (WI)	1930-1954	22	40	4	2190	270*	60.83	416+

In [36]: `df.drop(['Span'],axis=1,inplace=True)`

In [37]: `df.head(3)`

Out[37]:

	Player	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced	Battin
0	DG Bradman (AUS)	52	80	10	6996	334	99.94	9800+	
1	HC Brook (ENG)	12	20	1	1181	186	62.15	1287	
2	AC Voges (AUS)	20	31	7	1485	269*	61.87	2667	

Split country from the player column

In [38]: `df['Player'].str.split(pat='(')`

Out[38]:

```

0      [DG Bradman , AUS]]
1      [HC Brook , ENG]]
2      [AC Voges , AUS]]
3      [RG Pollock , SA]]
4      [GA Headley , WI]]
...
61     [KD Walters , AUS]]
62     [GC Smith , ICC/SA]]
63     [WH Ponsford , AUS]]
64     [SJ McCabe , AUS]]
65     [DR Jardine , ENG]]
Name: Player, Length: 64, dtype: object

```

```
In [39]: df['Country']=df['Player'].str.split(pat='(').str[1]
```

```
In [40]: df['Country']
```

```
Out[40]: 0      AUS)
          1      ENG)
          2      AUS)
          3      SA)
          4      WI)
          ...
          61     AUS)
          62    ICC/SA)
          63     AUS)
          64     AUS)
          65     ENG)
          Name: Country, Length: 64, dtype: object
```

```
In [43]: df['Country']=df['Country'].str.split(pat=')').str[0]
```

```
In [44]: df['Country']
```

```
Out[44]: 0      AUS
          1      ENG
          2      AUS
          3      SA
          4      WI
          ...
          61     AUS
          62    ICC/SA
          63     AUS
          64     AUS
          65     ENG
          Name: Country, Length: 64, dtype: object
```

```
In [45]: df['Player']
```

```
Out[45]: 0      DG Bradman (AUS)
          1      HC Brook (ENG)
          2      AC Voges (AUS)
          3      RG Pollock (SA)
          4      GA Headley (WI)
          ...
          61     KD Walters (AUS)
          62     GC Smith (ICC/SA)
          63     WH Ponsford (AUS)
          64     SJ McCabe (AUS)
          65     DR Jardine (ENG)
          Name: Player, Length: 64, dtype: object
```

```
In [46]: df['Player']=df['Player'].str.split(pat='(').str[0]
```

```
In [47]: df['Player']
```

```
Out[47]: 0      DG Bradman
1      HC Brook
2      AC Voges
3      RG Pollock
4      GA Headley
...
61     KD Walters
62     GC Smith
63     WH Ponsford
64     SJ McCabe
65     DR Jardine
Name: Player, Length: 64, dtype: object
```

```
In [48]: df.head(3)
```

```
Out[48]:
```

	Player	Matches	Inns	Not_Outs	Runs	Highest_Inns_Score	Ave	Balls_Faced	Batting
0	DG Bradman	52	80	10	6996	334	99.94	9800+	
1	HC Brook	12	20	1	1181	186	62.15	1287	
2	AC Voges	20	31	7	1485	269*	61.87	2667	

change Datatypes

```
In [49]: df.dtypes
```

```
Out[49]: Player          object
Matches          int64
Inns             int64
Not_Outs         int64
Runs             int64
Highest_Inns_Score object
Ave              float64
Balls_Faced      object
Batting_Strike_Rate float64
100              int64
50               int64
0                int64
4s              object
6s              object
Start_Year       object
End_Year         object
Country          object
dtype: object
```

```
In [51]: text = "***Important Text***"
stripped_text = text.strip('*')
print(stripped_text)
```

Important Text

```
In [52]: df['Highest_Inns_Score']
```

```
Out[52]: 0      334
          1      186
          2     269*
          3      274
          4     270*
          ...
          61     250
          62     277
          63     266
          64     232
          65     127
          Name: Highest_Inns_Score, Length: 64, dtype: object
```

```
In [54]: df['Highest_Inns_Score']=df['Highest_Inns_Score'].str.strip('*')
```

```
In [55]: df['Highest_Inns_Score']
```

```
Out[55]: 0      334
          1      186
          2      269
          3      274
          4      270
          ...
          61     250
          62     277
          63     266
          64     232
          65     127
          Name: Highest_Inns_Score, Length: 64, dtype: object
```

```
In [60]: df['Highest_Inns_Score']=df['Highest_Inns_Score'].astype('int')
```

```
In [61]: df.dtypes
```

```
Out[61]: Player          object
Matches          int64
Inns              int64
Not_Outs          int64
Runs              int64
Highest_Inns_Score  int32
Ave              float64
Balls_Faced       object
Batting_Strike_Rate float64
100              int64
50               int64
0               int64
4s               object
6s               object
Start_Year        object
End_Year          object
Country           object
dtype: object
```

```
In [63]: df=df.astype({'Start_Year':'int','End_Year':'int'})
```

```
In [65]: df.dtypes
```

```
Out[65]: Player          object
Matches          int64
Inns             int64
Not_Outs         int64
Runs             int64
Highest_Inns_Score int32
Ave              float64
Balls_Faced      object
Batting_Strike_Rate float64
100              int64
50               int64
0                int64
4s               object
6s               object
Start_Year       int32
End_Year         int32
Country          object
dtype: object
```

```
In [66]: df['Balls_Faced']
```

```
Out[66]: 0      9800+
1       1287
2       2667
3      1707+
4       416+
...
61     8662+
62     15525
63     3118+
64     3217+
65     2110+
Name: Balls_Faced, Length: 64, dtype: object
```

```
In [67]: df['Balls_Faced']=df['Balls_Faced'].str.strip('+')
```

```
In [76]: df['Balls_Faced']=df['Balls_Faced'].astype('int')
```

In [78]: `df.dtypes`

```
Out[78]: Player                object
Matches                int64
Inns                   int64
Not_Out                int64
Runs                   int64
Highest_Inns_Score     int32
Ave                    float64
Balls_Faced            int32
Batting_Strike_Rate    float64
100                    int64
50                     int64
0                      int64
4s                     object
6s                     object
Start_Year             int32
End_Year               int32
Country                object
dtype: object
```

append career_length column

In [80]: `df['Career_Length']=df['End_Year']-df['Start_Year']`

In [91]: `df.head(3)`

```
Out[91]:
```

	Player	Matches	Inns	Not_Out	Runs	Highest_Inns_Score	Ave	Balls_Faced	Batting
0	DG Bradman	52	80	10	6996	334	99.94	9800	
1	HC Brook	12	20	1	1181	186	62.15	1287	
2	AC Voges	20	31	7	1485	269	61.87	2667	

Analysis

In [82]: *#1. What is the avg career length*
`df['Career_Length'].mean()`

Out[82]: 12.75

In [83]: *#2. what is the avg batting strike rate for cricketers who played over 10 y*
`df[df['Career_Length']>10]['Batting_Strike_Rate'].mean()`

Out[83]: 47.95454545454545


```
In [86]: #3. find no. of cricketers who played before 1960
df[df['Start_Year'] < 1960]['Player'].count()
```

Out[86]: 23

```
In [92]: # Find Max highest inns score by Country
df.groupby('Country')['Highest_Inns_Score'].max().to_frame('Highinncountry')
reset_index().sort_values('Highinncountry', ascending=False)
```

Out[92]:

	Country	Highinncountry
5	ICC/WI	400
0	AUS	380
10	SL	374
11	WI	365
1	ENG	364
3	ICC/PAK	329
2	ICC/IND	319
8	PAK	313
9	SA	278
4	ICC/SA	277
6	IND	254
7	NZ	251
12	ZIM	232

```
In [90]: # Find Max highest inns scoore by Country
round(df.groupby('Country')[['100', '50', '0']].mean(), 2)
```

Out[90]:

	100	50	0
Country			
AUS	20.62	28.00	8.50
ENG	12.31	20.77	4.31
ICC/IND	29.50	47.50	12.00
ICC/PAK	25.00	46.00	15.00
ICC/SA	36.00	48.00	13.50
ICC/WI	34.00	48.00	17.00
IND	29.50	36.25	10.75
NZ	12.33	16.33	4.33
PAK	17.80	23.20	8.00
SA	9.80	20.20	3.40
SL	28.67	44.00	12.33
WI	16.62	25.62	7.25
ZIM	12.00	27.00	5.00

