In [83]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

In [82]:
```
df=pd.read_csv("C:/Users/sirvi/OneDrive/Desktop/complete/ROHIT SHARMA/rohit sharma excel file.csv")
#FILE UPLOAD
```

In [12]:
```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 48 entries, 0 to 47
Data columns (total 16 columns):
 #   Column            Non-Null Count  Dtype  
---  ------            --------------  -----  
 0   S.No.             48 non-null     int64  
 1   year              48 non-null     int64  
 2   Date              48 non-null     object 
 3   month             48 non-null     object 
 4   Score             48 non-null     int64  
 5   Strike Rate       48 non-null     float64
 6   Type of Match     48 non-null     object 
 7   Position          48 non-null     int64  
 8   Innings           48 non-null     int64  
 9   Dismissed         48 non-null     object 
 10  Man of the Match  48 non-null     object 
 11  Captain           48 non-null     object 
 12  Against           48 non-null     object 
 13  Venue             48 non-null     object 
 14  H/A/N             48 non-null     object 
 15  Result            48 non-null     object 
dtypes: float64(1), int64(5), object(10)
memory usage: 6.1+ KB
```

In [13]:
```
df.shape
```

Out[13]:
```
(48, 16)
```

THE DATA HAS 48 ROWS AND 16 COLUMNS.

In [14]:
```
 pd.isnull(df)
```

Out[14]:

	S.No.	year	Date	month	Score	Strike Rate	Type of Match	Position	Innings	Dismissed	Man of the Match	Captain	Against	Venue	H/A/N	Result
0	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
3	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
5	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
6	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
7	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
8	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
9	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
10	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
11	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
12	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
13	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
14	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
15	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
16	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
17	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
18	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
19	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
20	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
21	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
22	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
23	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
24	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
25	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
26	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
27	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
28	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
29	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
30	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
31	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
32	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
33	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
34	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
35	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
36	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
37	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
38	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
39	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
40	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
41	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
42	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
43	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
44	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
45	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
46	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
47	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False

NO NULL VALUE DETECTED

In [15]:
```
df.columns
```

Out[15]:
```
Index(['S.No.', 'year', 'Date', 'month', 'Score', 'Strike Rate',
       'Type of Match', 'Position', 'Innings', 'Dismissed ',
       'Man of the Match', 'Captain', 'Against', 'Venue', 'H/A/N', 'Result'],
      dtype='object')
```

DATA CLEANING ,BINNING,INTEGRATION COMPLETES HERE.

In [ ]:

EDA-EXPLORATORY DATA ANALYSIS

In [26]:
```
df[['Strike Rate','Score']].describe()
```

Out[26]:

	Strike Rate	Score
count	48.000000	48.000000
mean	109.656042	134.937500
std	41.704401	34.744298
min	50.560000	100.000000
25%	85.197500	111.000000
50%	105.710000	124.500000
75%	121.100000	147.750000
max	274.410000	264.000000

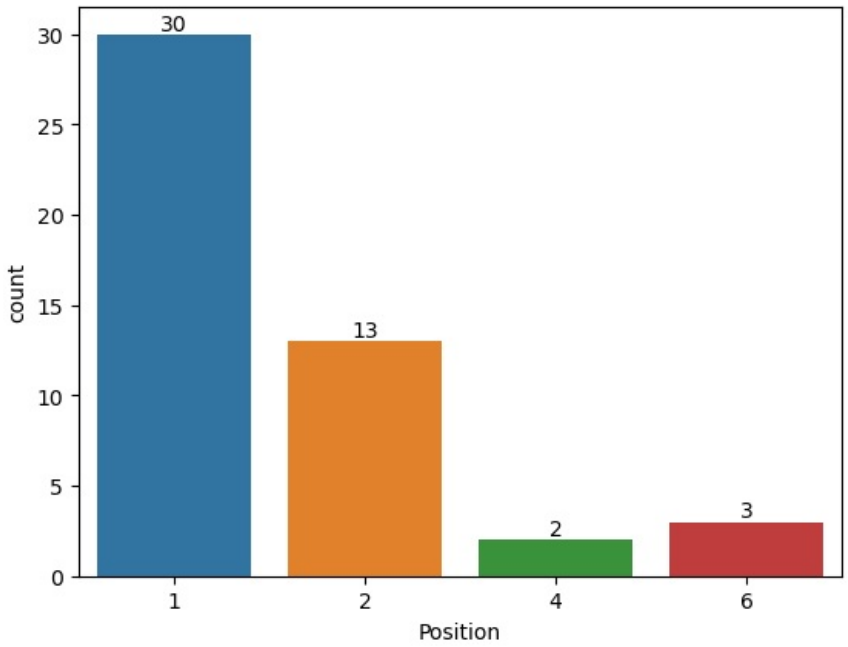
HE HAS SHOWN EXCEPTIONAL SKILLS WITH GREAT STRIKE_RATE WITH LOWEST STRIKE RATE IN TESTS AT 50.5600 AND HIGHEST STRIKE RATE AT 274 IN AN ODI WITH SRI_LANKA WITH THE HIGHEST ONE_DAY SCORE OF 264 WORLDWIDE.

In [ ]:

1.ASK NO-1 CENTURY BY POSITION

In [ ]:

In [29]:
```
bx=sns.countplot(x = 'Position',data=df)
for bars in bx.containers:
    bx.bar_label(bars)
```



CONCLUSION -HIS BATTING SKYROCKETED WHEN HE STARTED BATTING AT NO 1 POSITION.

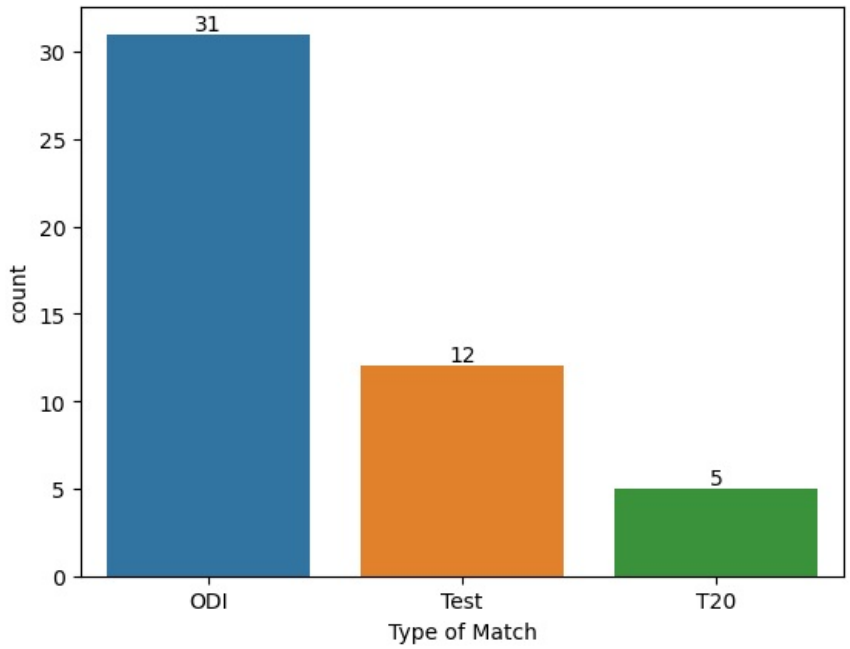
In [ ]:

In [33]:
```
df.columns
```

Out[33]:
```
Index(['S.No.', 'year', 'Date', 'month', 'Score', 'Strike Rate',
       'Type of Match', 'Position', 'Innings', 'Dismissed ',
       'Man of the Match', 'Captain', 'Against', 'Venue', 'H/A/N', 'Result'],
      dtype='object')
```

2. ask 2-century by format

In [49]:
```
bx=sns.countplot(x = 'Type of Match',data=df)
for bars in bx.containers:
    bx.bar_label(bars)
```

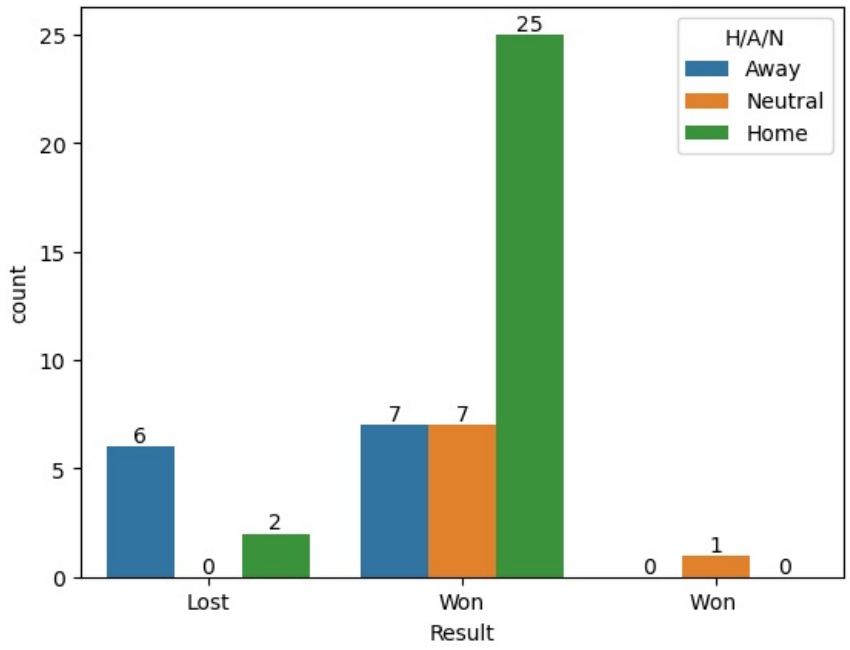


conclusion-ODI FORMAT HAS MADE HIM A LEGEND WITH ONE OF THE HIGHEST NO OF CENTURIES.

3. ask 3. century by venue(home,away,neutral) and match result.

In [ ]:
```
```

In [52]:
```
ax=sns.countplot(data=df,x='Result',hue='H/A/N')
for bars in ax.containers:
    ax.bar_label(bars)
```



In [ ]:
```
```

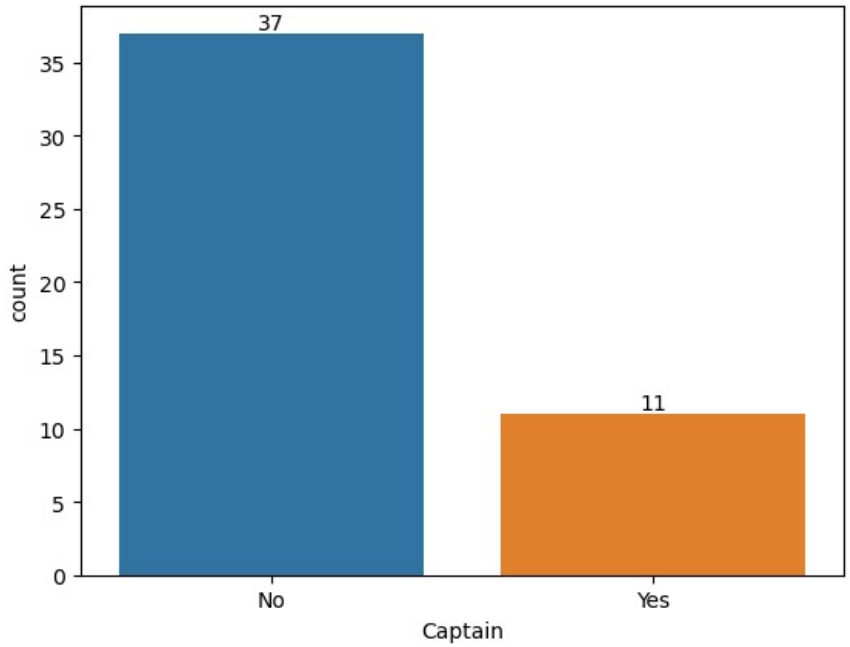
In [54]:
```
df.columns
```

Out[54]:
```
Index(['S.No.', 'year', 'Date', 'month', 'Score', 'Strike Rate',
       'Type of Match', 'Position', 'Innings', 'Dismissed ',
       'Man of the Match', 'Captain', 'Against', 'Venue', 'H/A/N', 'Result'],
      dtype='object')
```

In [ ]:

4. century by captaincy

In [55]:
```
bx=sns.countplot(x = 'Captain',data=df)
for bars in bx.containers:
    bx.bar_label(bars)
```



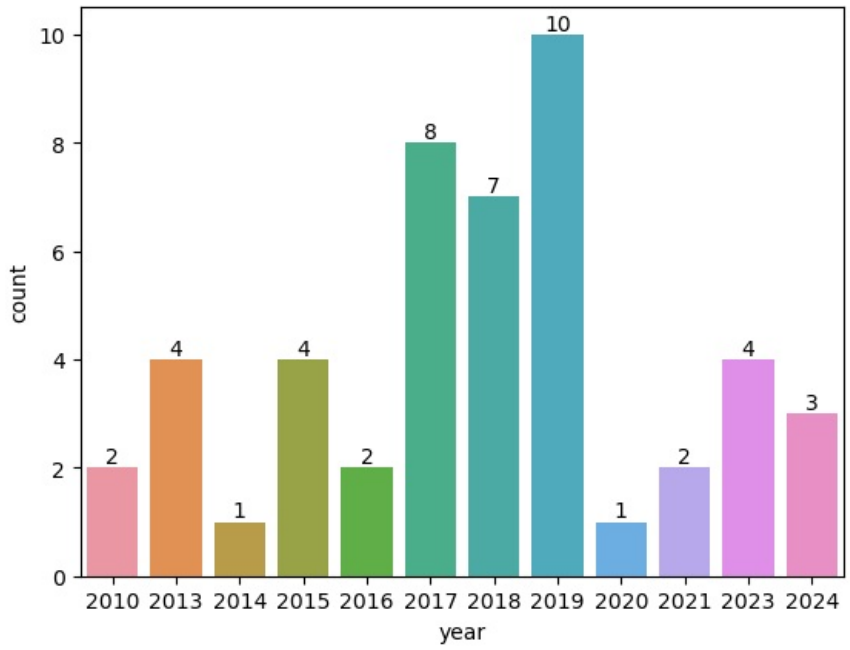
ITS LIKE A DREAM COME TRUE CAPTAINCY AND CENTURIES WITH OPENING ALL TOGETHER.

In [ ]:

5. BEST YEARS OF HIS CAREER

In [89]:

In [91]:
```
bx=sns.countplot(x ='year' ,data=df)
for bars in bx.containers:
    bx.bar_label(bars)
```

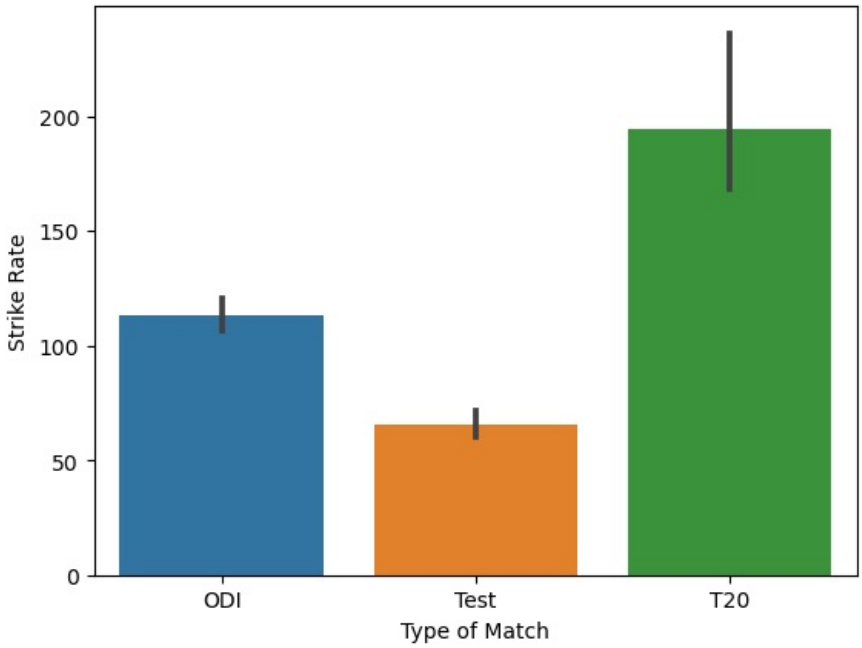


2019 was the milestone year of his life

6. strike rate as per format

In [100…
```
sales_age= df.groupby(['Type of Match'],as_index=False)['Strike Rate'].sum().sort_values(by='Strike Rate',ascen
sns.barplot(x='Type of Match',y='Strike Rate',data=df)
```

Out[100]:
```
<Axes: xlabel='Type of Match', ylabel='Strike Rate'>
```



with test average that hovers around 65 ,the odi average goes to 113,and t20 to 200 plus

In [ ]:

In [ ]: