

# virat-kohli-odi-performance

May 4, 2024

```
[1]: import pandas as pd
import numpy as numpy
import matplotlib.pyplot as plt
import seaborn as sns
df = pd.read_csv("Virat_Kohli_odi.csv")
df
```

```
[1]:
```

	Year	Match	Innings	NotOuts	100s	50s	0s	Highest	Runs	\
0	2008	5	5	0	0	1	0	54	159	
1	2009	10	8	2	1	2	0	107	325	
2	2010	25	24	3	3	7	3	118	995	
3	2011	34	34	5	4	8	2	117	1381	
4	2012	17	17	2	5	3	1	183	1026	
5	2013	34	30	6	4	7	3	115*	1268	
6	2014	21	20	2	4	5	1	139*	1054	
7	2015	20	20	3	2	1	0	138	623	
8	2016	10	10	2	3	4	0	154*	739	
9	2017	26	26	7	6	7	2	131	1460	
10	2018	14	14	5	6	3	0	160*	1202	
11	2019	26	25	2	5	7	1	123	1377	
12	2020	9	9	0	0	5	0	89	431	
13	2021	3	3	0	0	2	0	66	129	
14	2022	6	6	0	0	2	2	65	142	
15	Overall (15)	260	251	39	43	64	15	183	12311	

	Average	Strike_Rate	CatchesTaken
0	31.80	67	3
1	54.17	84	4
2	47.38	85	9
3	47.62	86	19
4	68.40	94	14
5	52.83	98	11
6	58.56	100	8
7	36.65	81	11
8	92.38	100	6
9	76.84	99	9
10	133.56	103	9

11	59.87	96	21
12	47.89	92	5
13	43.00	87	3
14	23.67	76	5
15	58.07	93	137

```
[2]: df.dtypes
```

```
[2]: Year          object
Match          int64
Innings        int64
NotOuts        int64
100s           int64
50s            int64
0s             int64
Highest        object
Runs           int64
Average        float64
Strike_Rate    int64
CatchesTaken  int64
dtype: object
```

```
[4]: df.dtypes
```

```
[4]: Year          object
Match          int64
Innings        int64
NotOuts        int64
100s           int64
50s            int64
0s             int64
Highest        object
Runs           int64
Average        float64
Strike_Rate    int64
CatchesTaken  int64
dtype: object
```

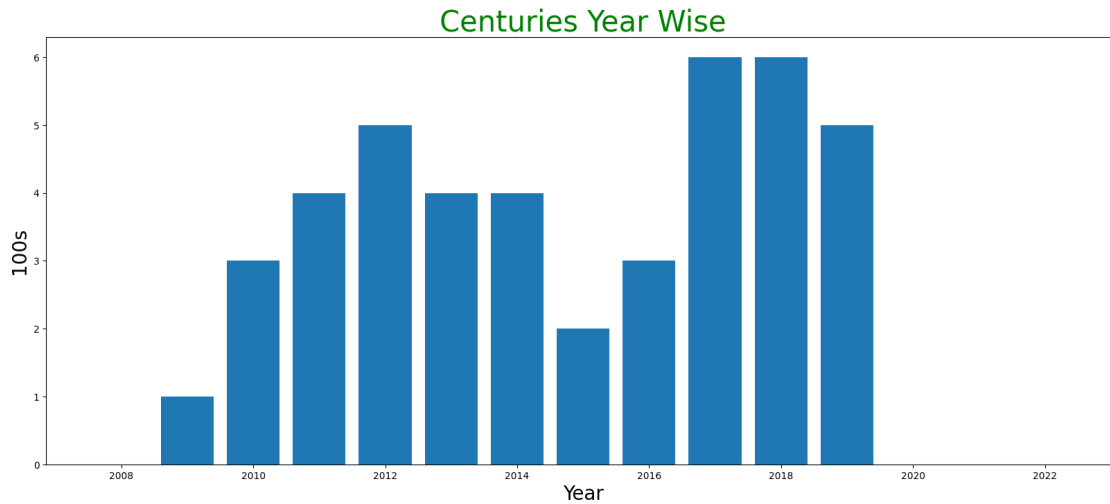
```
[5]: df[["Year", "Match", "Innings", "NotOuts", "100s", "50s", "0s", "Runs", "CatchesTaken"]] = df[["Year", "M
      ↳ astype("int")
df.rename(columns = {'100s': 'century', '50s': 'fifties', '0s': 'ducks'}, inplace =
      ↳ True)
df
```

```
[5]:   Year  Match  Innings  NotOuts  century  fifties  ducks  Highest  Runs  \
0  2008      5        5        0        0        1        0        54    159
1  2009     10        8        2        1        2        0       107    325
```

2	2010	25	24	3	3	7	3	118	995
3	2011	34	34	5	4	8	2	117	1381
4	2012	17	17	2	5	3	1	183	1026
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9	2017	26	26	7	6	7	2	131	1460
10	2018	14	14	5	6	3	0	160*	1202
11	2019	26	25	2	5	7	1	123	1377
12	2020	9	9	0	0	5	0	89	431
13	2021	3	3	0	0	2	0	66	129
14	2022	6	6	0	0	2	2	65	142

	Average	Strike_Rate	CatchesTaken
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12	47.89	92	5
13	43.00	87	3
14	23.67	76	5

```
[6]: # plotting the bar chart of centuries year wise
plt.figure(figsize=(20,8))
plt.bar(df.Year,df.century)
plt.title('Centuries Year Wise',color='green',size=30)
plt.xlabel('Year', size=20)
plt.ylabel('100s', size=20)
plt.show()
```

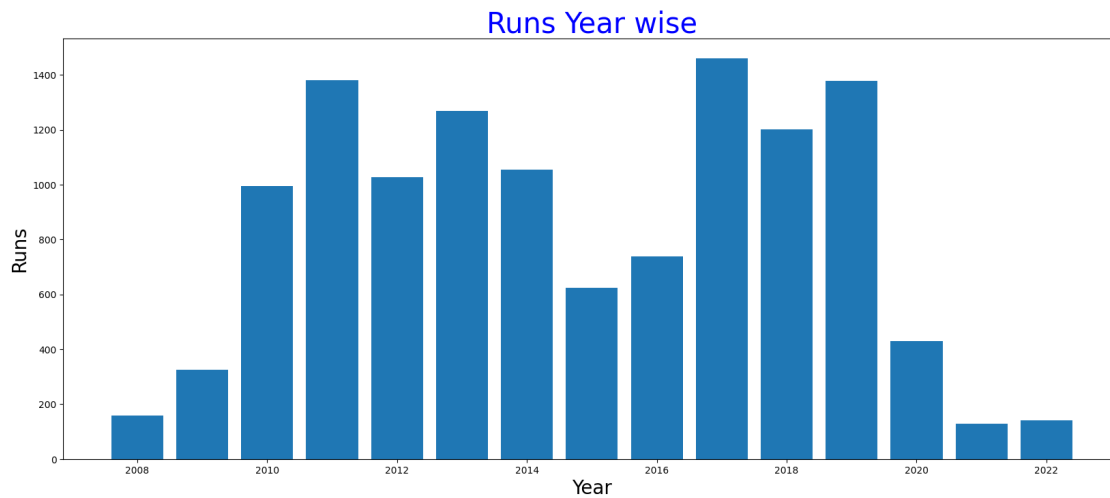


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[8]: #year wise centuries, fifties and ducks.
plt.figure(figsize=(20,8))
plt.bar(df.Year,df.ducks,label='ducks')
plt.plot(df.Year,df.century,label='century')
plt.plot(df.Year,df.fifties,label='fifties')
plt.legend()
plt.title('performance',color='green',size=30)
plt.xlabel('year',size=20)
plt.xlabel('Performance',size=20)
```

```
[8]: Text(0.5, 0, 'Performance')
```



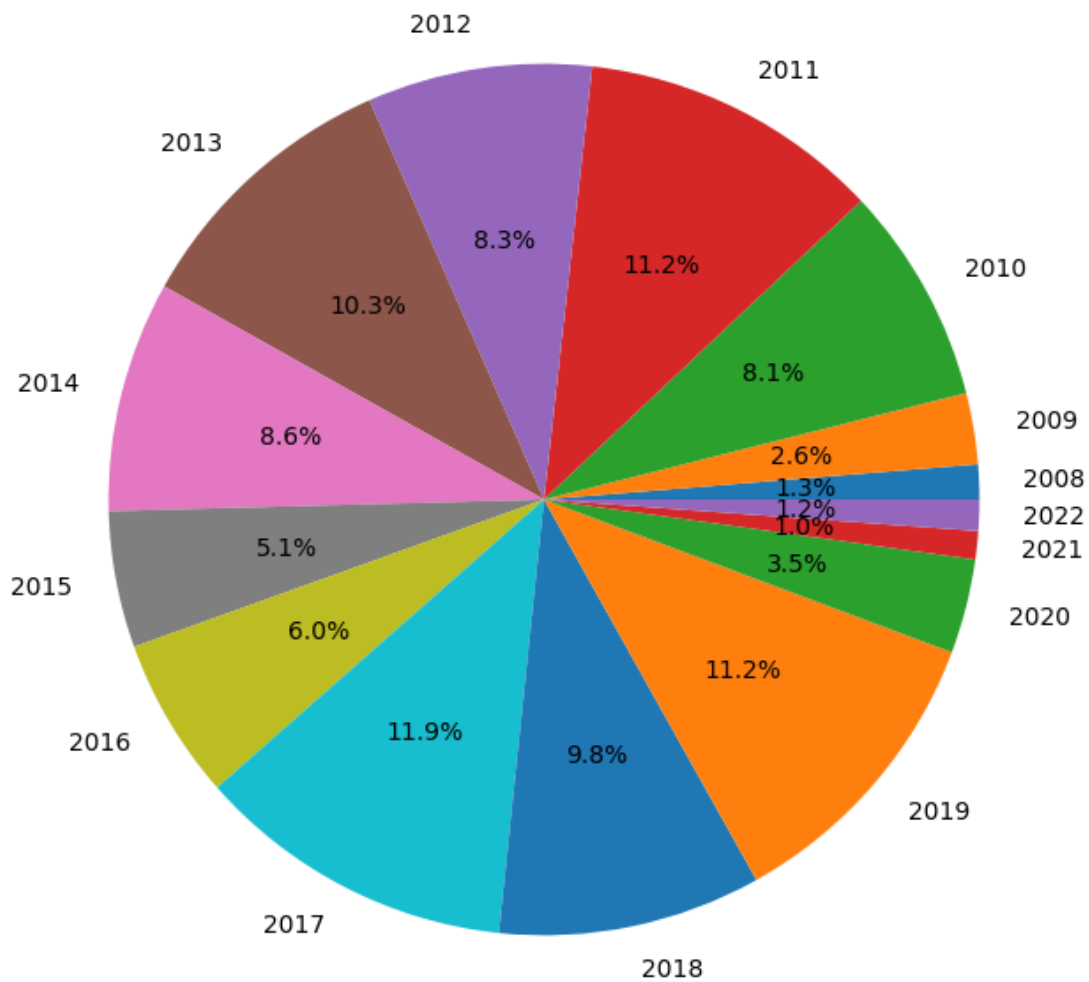
```
[10]: #YEARWISE RUNS SCORED
plt.figure(figsize=(20,8))
plt.bar(df.Year,df.Runs)
plt.title('Runs Year wise',color='blue',size=30)
plt.xlabel('Year', size=20)
plt.ylabel('Runs',size=20)
plt.show()
```



```
[14]: year_runs = df.groupby('Year')['Runs'].sum()

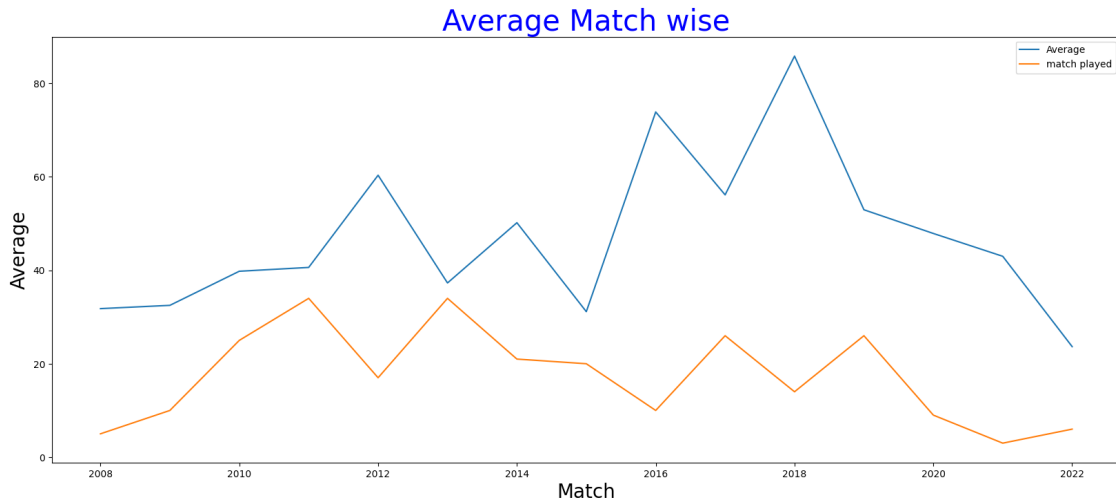
plt.figure(figsize=(15, 8))
plt.pie(year_runs, labels=year_runs.index, autopct="%1.1f%%")
plt.title('Year-wise Average of Runs Scored', color='blue', size=20)
plt.show()
```

## Year-wise Average of Runs Scored



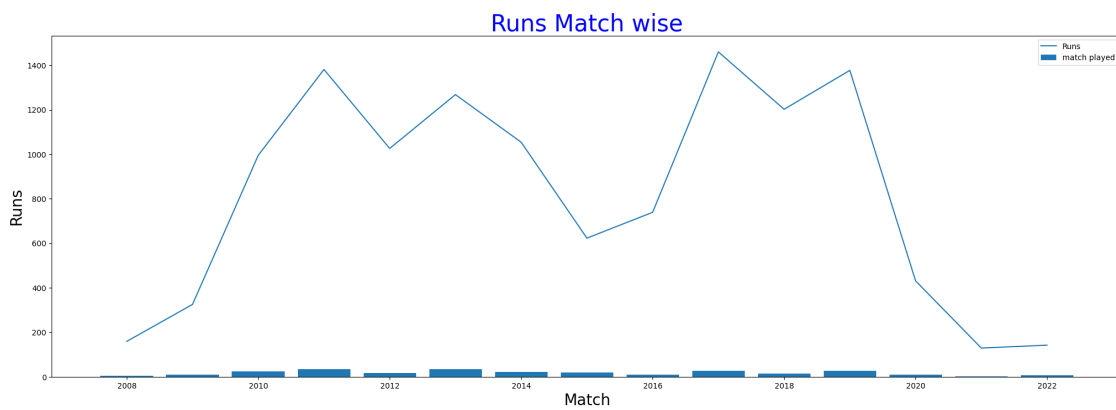
[16]: *#match played vs Average*

```
plt.figure(figsize=(20,8))
plt.plot(df.Year,df.Average, label='Average')
plt.plot(df.Year,df.Match,label='match played')
plt.title('Average Match wise',color='blue',size=30)
plt.legend()
plt.xlabel('Match',size=20)
plt.ylabel('Average',size=20)
plt.show()
```



[18]: *#match played vs Runs scored*

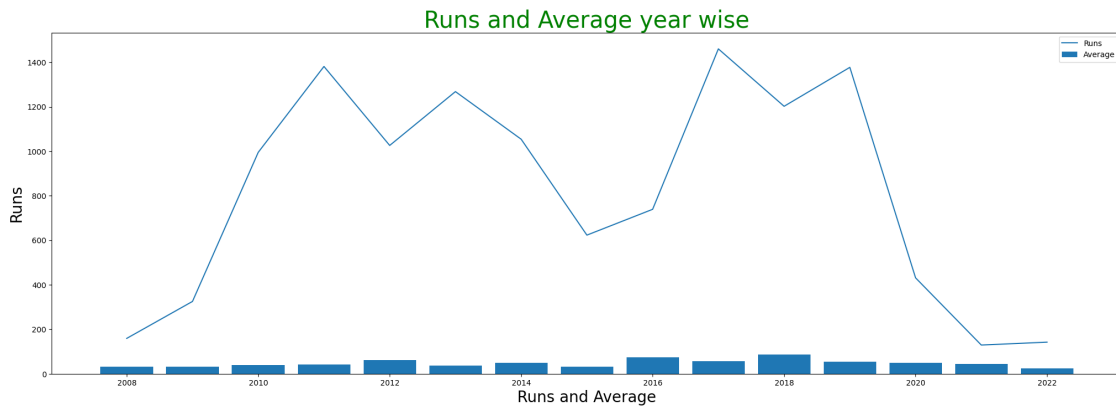
```
plt.figure(figsize=(25,8))
plt.plot(df.Year,df.Runs, label='Runs')
plt.bar(df.Year,df.Match,label='match played')
plt.title('Runs Match wise',color='blue',size=30)
plt.legend()
plt.xlabel('Match',size=20)
plt.ylabel('Runs',size=20)
plt.show()
```



[19]: *#match played vs Runs scored*

```
plt.figure(figsize=(25,8))
plt.plot(df.Year,df.Runs, label='Runs')
plt.bar(df.Year,df.Average,label='Average')
plt.title('Runs and Average year wise',color='green',size=30)
```

```
plt.legend()
plt.xlabel('Runs and Average',size=20)
plt.ylabel('Runs',size=20)
plt.show()
```



[20]: *#YEARWISE stikerate*

```
plt.figure(figsize=(25,8))
plt.plot(df.Year,df.Strike_Rate)
plt.title('Strike_Rate Year wise',color='blue',size=30)
plt.xlabel('Year',size=20)
plt.ylabel('Strike_Rate',size=20)
plt.show()
```

