

```
In [1]: #setting up working directory to import dataset
import os
```

```
In [2]: os.chdir("C:\\Users\\Dell\\3D Objects\\one drive\\OneDrive\\Documents\\datasets")
```

```
In [3]: # Virat Kohli is one of the most famous cricketers in the world.
#Here it is a dataset of all the ODI matches played by Virat Kohli from 18 August 2008 to
#here we analyze the performance of Virat Kohli in ODI matches.
```

```
In [4]: import numpy as np
import pandas as pd
import plotly.express as px
```

```
In [5]: data=pd.read_csv("Virat_Kohli.csv")
```

```
In [6]: data.head()
```

```
Out[6]:
```

	Runs	BF	4s	6s	SR	Pos	Dismissal	Inns	Opposition	Ground	Start Date
0	12	22	1	0	54.54	2.0	lbw	1	v Sri Lanka	Dambulla	18-Aug-08
1	37	67	6	0	55.22	2.0	caught	2	v Sri Lanka	Dambulla	20-Aug-08
2	25	38	4	0	65.78	1.0	run out	1	v Sri Lanka	Colombo (RPS)	24-Aug-08
3	54	66	7	0	81.81	1.0	bowled	1	v Sri Lanka	Colombo (RPS)	27-Aug-08
4	31	46	3	1	67.39	1.0	lbw	2	v Sri Lanka	Colombo (RPS)	29-Aug-08

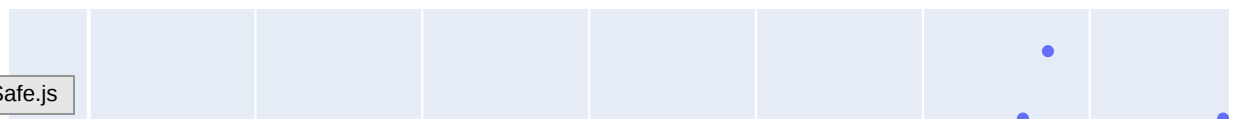
```
In [7]: data.isnull().sum()
```

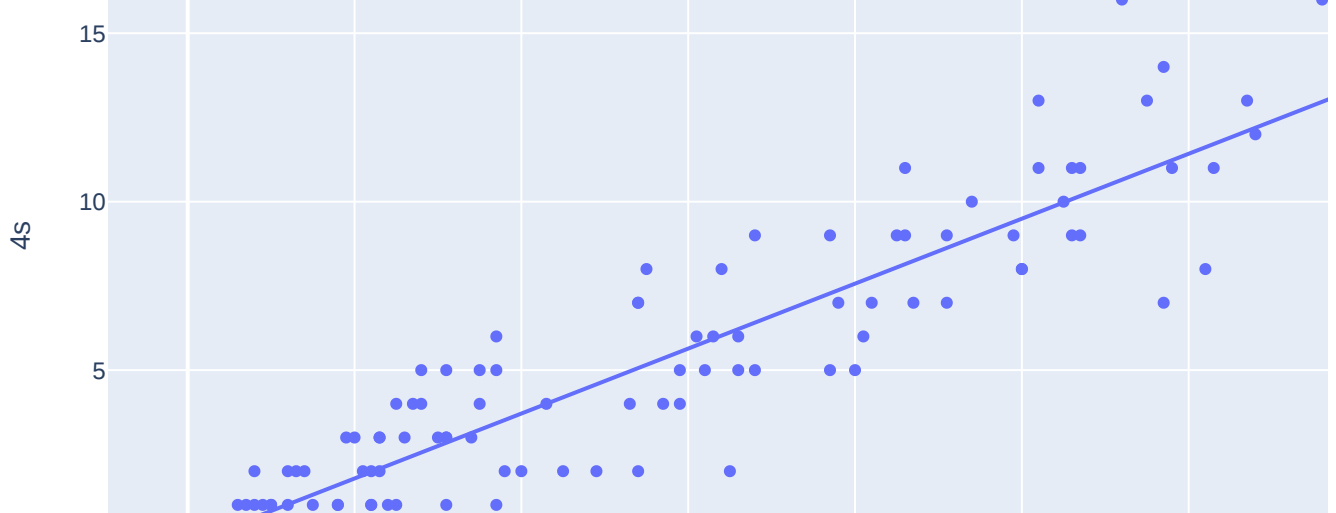
```
Out[7]: Runs      0
BF      0
4s      0
6s      0
SR      0
Pos      0
Dismissal  0
Inns      0
Opposition  0
Ground      0
Start Date  0
dtype: int64
```

```
In [8]: px.scatter(data_frame=data,y="4s",x="Runs",title="relationship between no of 4s in a match and runs scored")
```



relationship between no of 4s in a match and runs scored

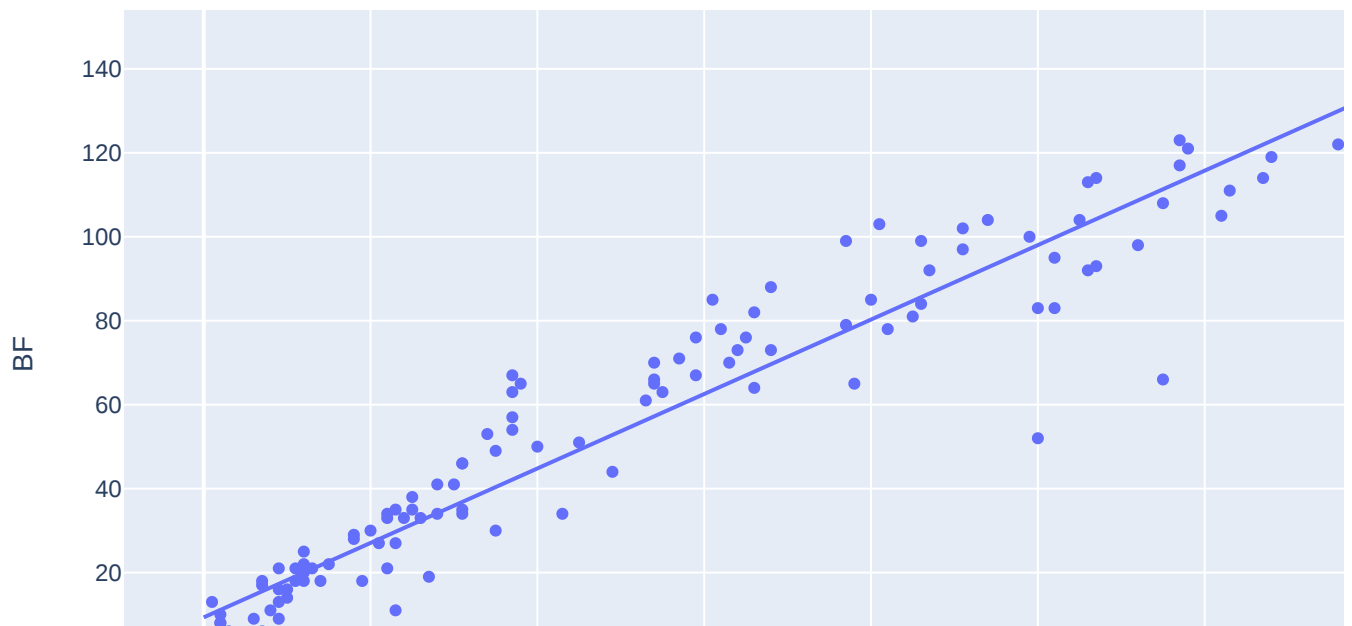




In [9]: `px.scatter(data_frame=data,y="BF",x="Runs",title="relationship between no of balls faced a`



relationship between no of balls faced and runs scored

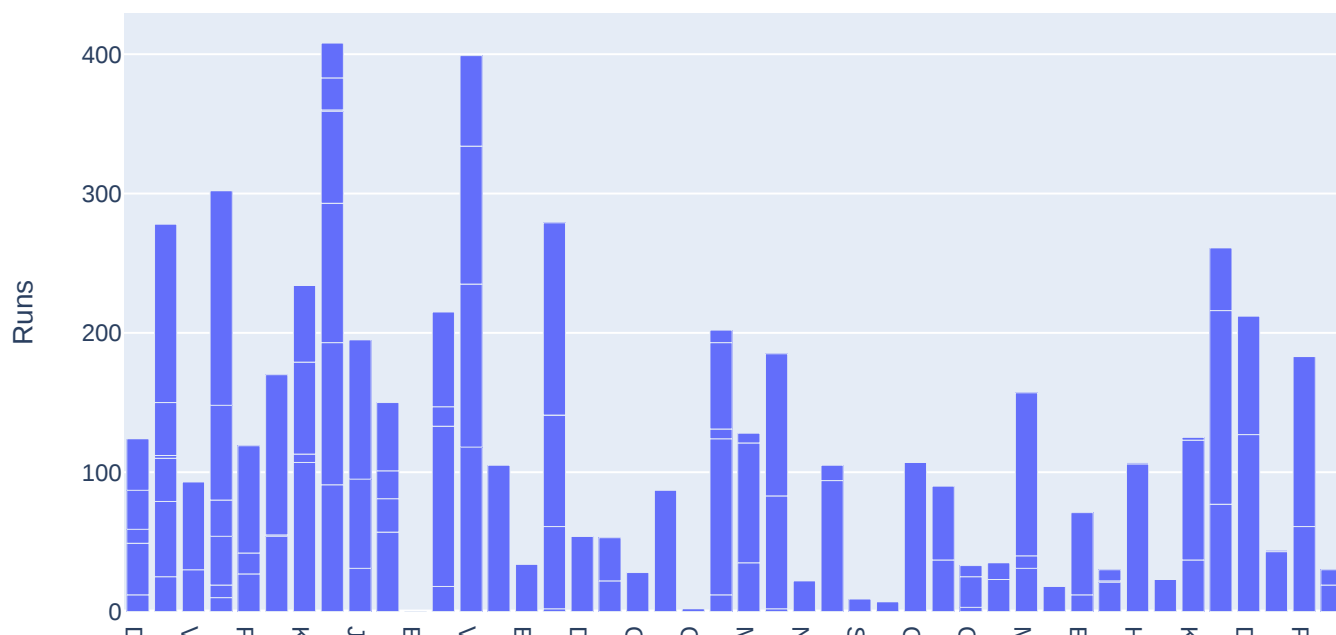


In [10]: `px.bar(data_frame=data,x="Opposition",y="Runs",title="no of runs scored against a team")`



Category	Runs
Category 1	1080
Category 2	990
Category 3	540
Category 4	550
Category 5	210
Category 6	1010

```
px.bar(data_frame=data,x="Ground",y="Runs",title="no of runs scored in a ground")
```



```
In [12]: #how many times virat kohli got out of the match in a particular way
data["Dismissal"].value_counts()
```

```
Out[12]: caught      84
not out      17
run out      10
bowled       10
lbw          9
stumped      1
hit wicket   1
Name: Dismissal, dtype: int64
```

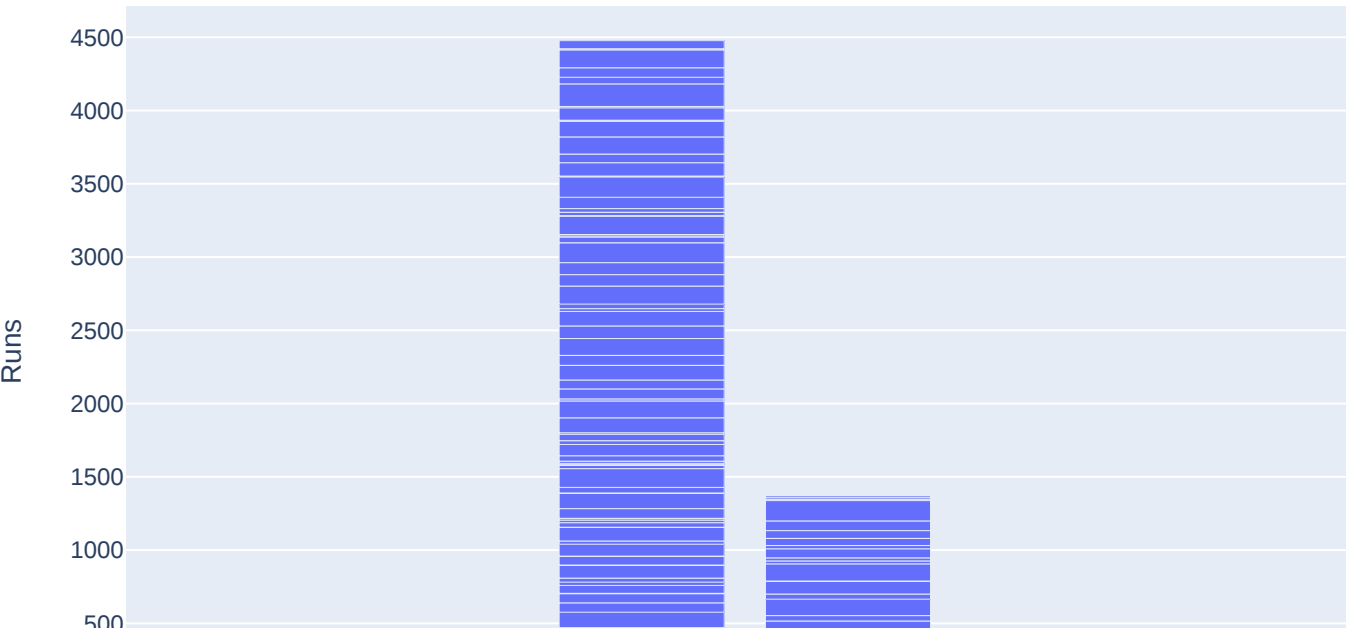
```
In [13]: #how many runs he scored from 18th august 2008 to 22 january 2017
data["Runs"].sum()
```

```
Out[13]: 6184
```

```
In [14]: px.bar(data_frame=data,x="Pos",y="Runs",title="no of runs scored while batting in a position")
```



no of runs scored while batting in a position



```
In [15]: data
```

Out[15]:

	Runs	BF	4s	6s	SR	Pos	Dismissal	Inns	Opposition	Ground	Start Date	
0	0	12	22	1	0	54.54	2.0	lbw	1	v Sri Lanka	Dambulla	18-Aug-08

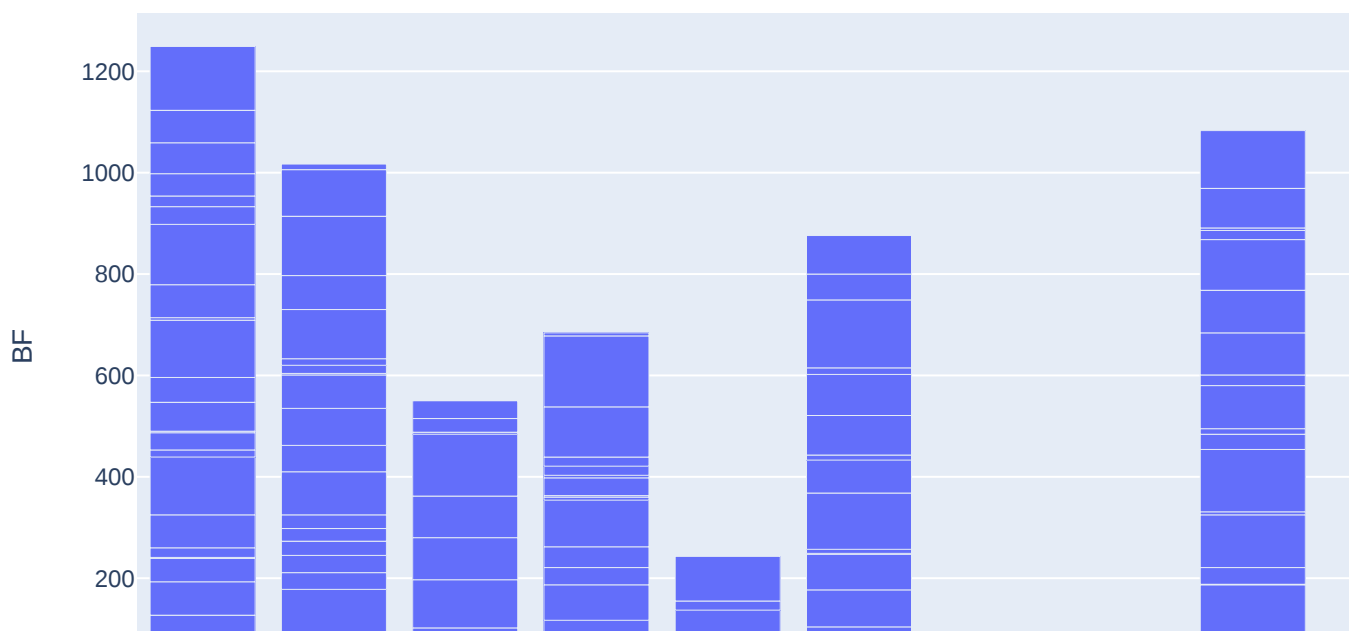
	Runs	BF	4s	6s	SR	Pos	Dismissal	Inns	Opposition	Ground	Start Date
1	37	67	6	0	55.22	2.0	caught	2	v Sri Lanka	Dambulla	20-Aug-08
2	25	38	4	0	65.78	1.0	run out	1	v Sri Lanka	Colombo (RPS)	24-Aug-08
3	54	66	7	0	81.81	1.0	bowled	1	v Sri Lanka	Colombo (RPS)	27-Aug-08
4	31	46	3	1	67.39	1.0	lbw	2	v Sri Lanka	Colombo (RPS)	29-Aug-08
...	...	...	...	...	...	...	...	...	...	...	...
127	45	51	2	1	88.23	3.0	caught	2	v New Zealand	Ranchi	26-Oct-16
128	65	76	2	1	85.52	3.0	caught	1	v New Zealand	Visakhapatnam	29-Oct-16
129	122	105	8	5	116.19	3.0	caught	2	v England	Pune	15-Jan-17
130	8	5	2	0	160.00	3.0	caught	1	v England	Cuttack	19-Jan-17
131	55	63	8	0	87.30	3.0	caught	2	v England	Kolkata	22-Jan-17

132 rows × 11 columns

```
In [16]: px.bar(data_frame=data,x="Opposition",y="BF",title="no of balls faced against in a team")
```



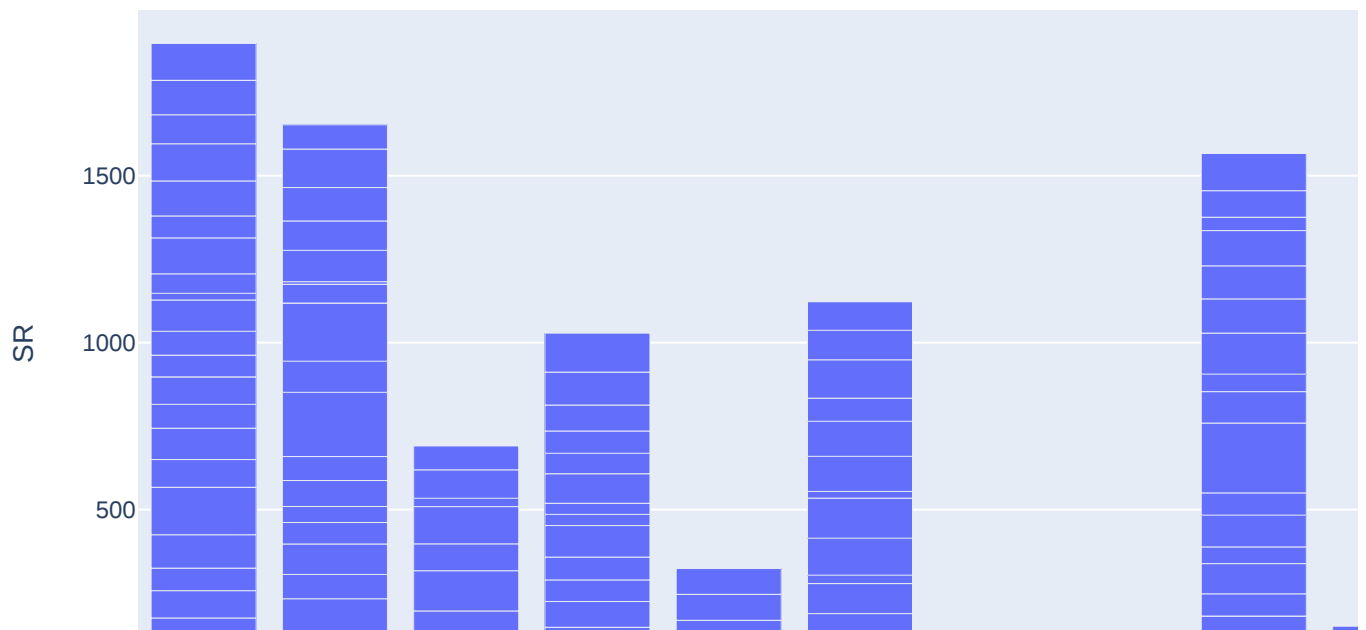
no of balls faced against in a team



```
In [17]: px.bar(data_frame=data,x="Opposition",y="SR",title="no of balls faced against in a team")
```



no of balls faced against in a team



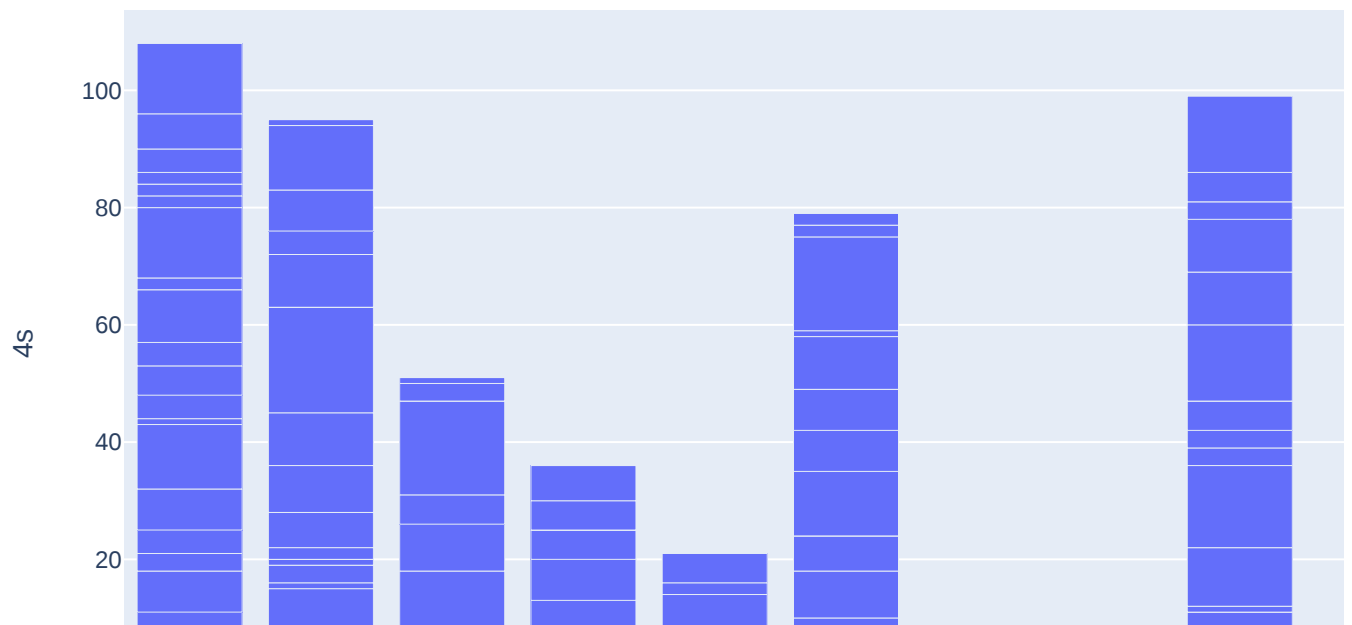
In [18]: `#avearge runs score by virat kohli  
data["Runs"].mean()`

Out[18]: 46.84848484848485

In [19]: `px.bar(data_frame=data,x="Opposition",y="4s",title="no 4s scored against in a team")`



no 4s scored against in a team

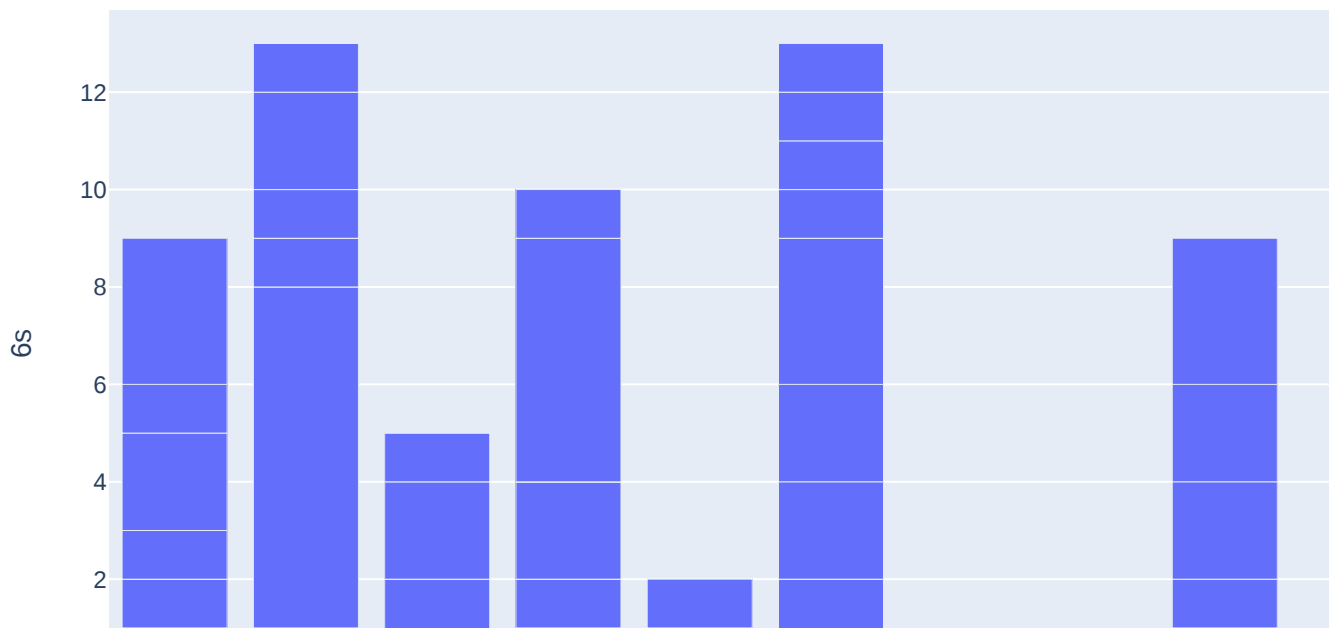


In [20]:

```
px.bar(data_frame=data,x="Opposition",y="6s",title="no 6s scored against in a team")
```

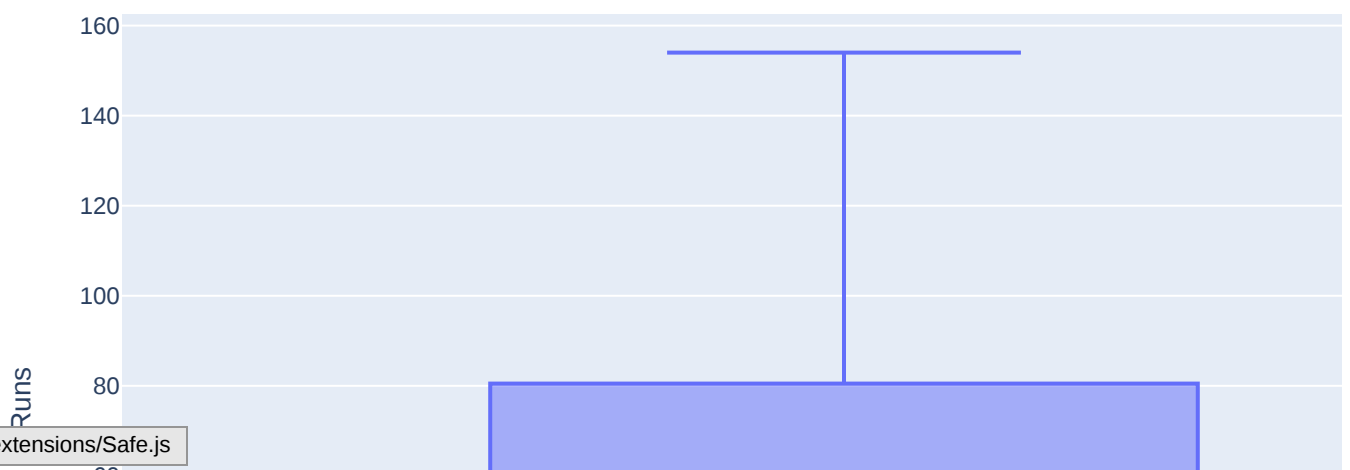


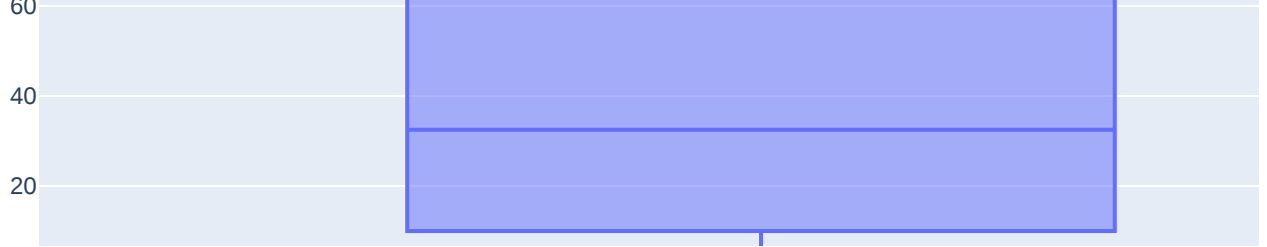
no 6s scored against in a team



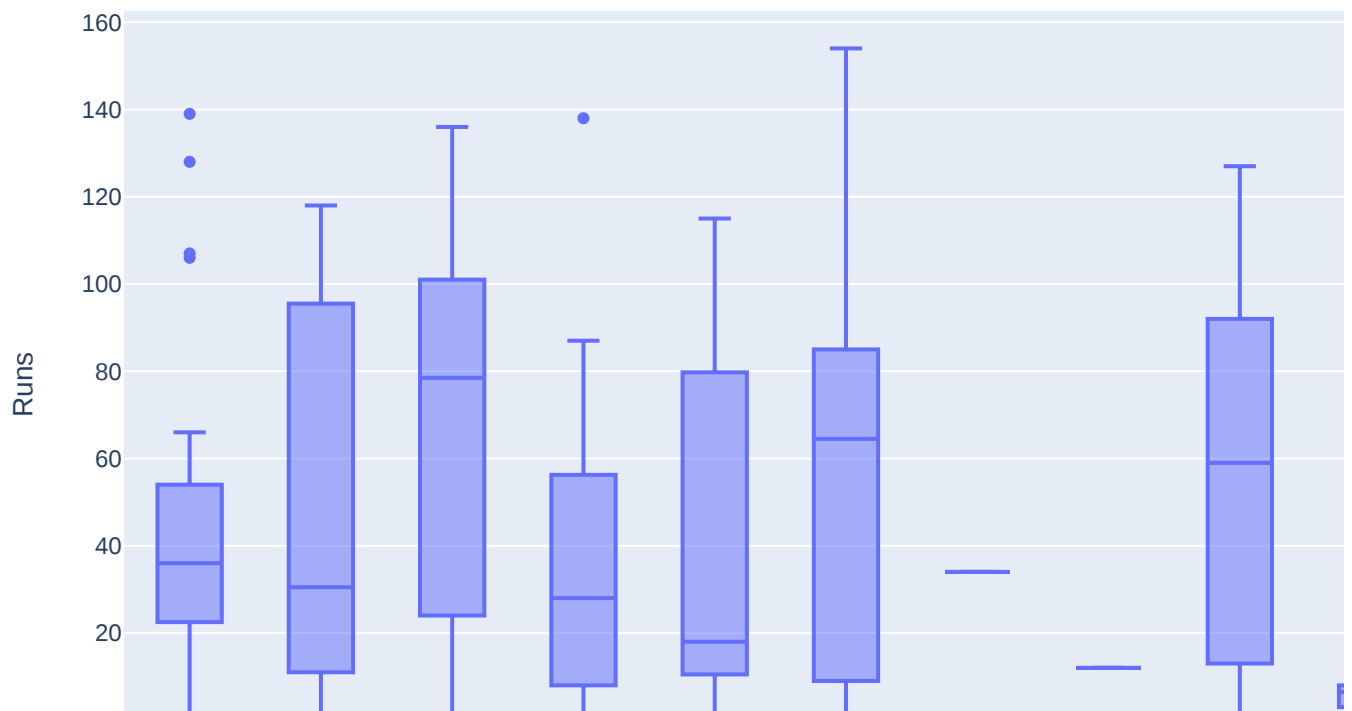
In [21]:

```
#distribution of runs scored  
px.box(data_frame=data,y="Runs")
```





```
In [22]: #distribution of runs scored against a team
px.box(data_frame=data,y="Runs",x="Opposition")
```

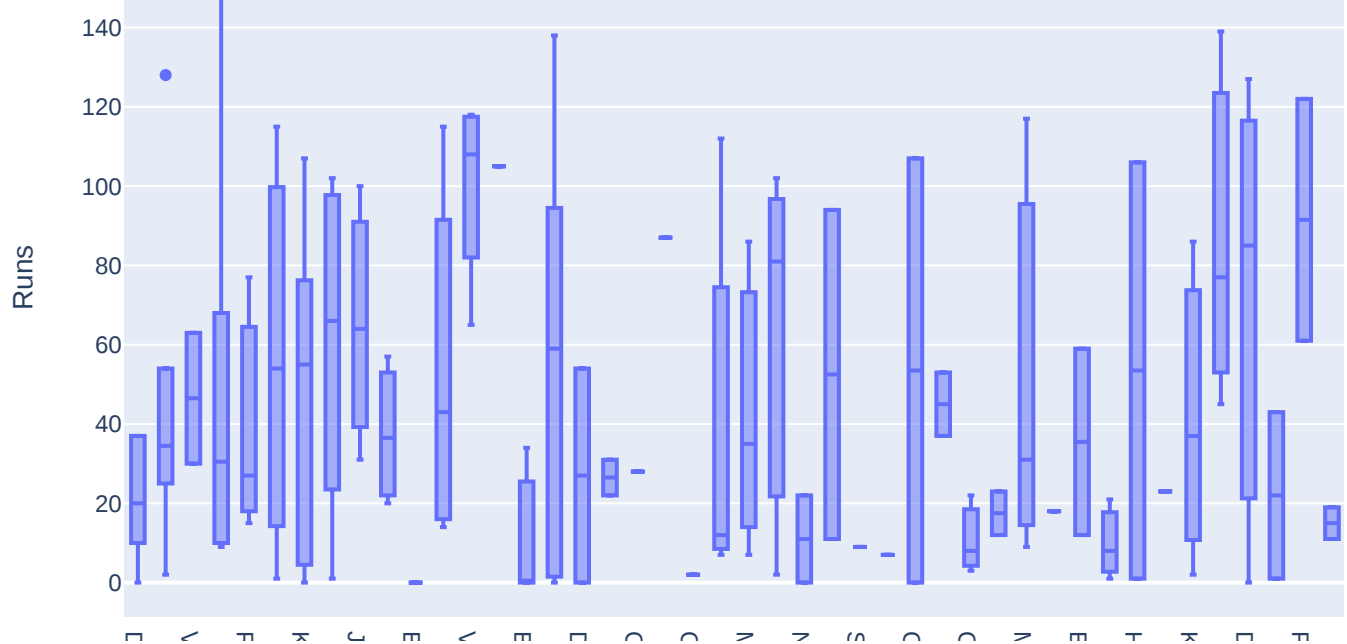


```
In [ ]:
```

```
In [23]: px.box(data_frame=data,y="Runs",x="Ground")
```







```
In [24]: #how many runs he scored against a particular team
data.groupby(['Opposition'])["Runs"].sum().sort_values(ascending=False)
```

```
Out[24]: Opposition
v Sri Lanka      1084
v West Indies    1009
v Australia      999
v New Zealand    877
v England        830
v South Africa   558
v Bangladesh     544
v Zimbabwe       215
v Ireland        34
v Pakistan       22
v Netherlands    12
Name: Runs, dtype: int64
```

```
In [25]: #how many runs he scored in a ground
data.groupby(['Ground'])["Runs"].sum().sort_values(ascending=False)
```

```
Out[25]: Ground
Dhaka          408
Visakhapatnam  399
Mohali         302
Chennai        279
Colombo (RPS)  278
Ranchi         261
Kolkata        234
Harare         215
Dharamsala     212
Delhi          202
Jaipur         195
Port of Spain  185
Pune           183
Nagpur         170
Melbourne      157
Loading [MathJax]/extensions/Safe.js 150
```

Fatullah	136
Mumbai	128
Kochi	125
Dambulla	124
Napier	123
Rajkot	119
Hambantota	107
Cardiff	107
Canberra	106
Kingston	105
Guwahati	105
Vadodara	93
Perth	91
Hyderabad (Deccan)	90
Port Elizabeth	87
Wellington	82
Hamilton	80
Brisbane	71
Durban	54
Johannesburg	53
Birmingham	44
Nottingham	40
Indore	35
Bengaluru	34
Cuttack	33
Kanpur	30
Sydney	30
Cape Town	28
Pallekele	23
North Sound	22
Adelaide	18
Leeds	13
Southampton	9
The Oval	7
Centurion	2
Bulawayo	0

Name: Runs, dtype: int64

In [ ]: