In [1]:
```
import pandas as pd
import numpy as np
import plotly.express as px
import plotly.graph_objects as go
```

In [3]:
```
data = pd.read_csv("C:\\Users\\91805\\Downloads\\virat_kohli.csv")
print(data.head())
```

```
   Runs  BF  4s  6s     SR  Pos Dismissal  Inns   Opposition         Ground  \
0    12  22   1   0  54.54  2.0       lbw     1  v Sri Lanka       Dambulla
1    37  67   6   0  55.22  2.0    caught     2  v Sri Lanka       Dambulla
2    25  38   4   0  65.78  1.0   run out     1  v Sri Lanka  Colombo (RPS)
3    54  66   7   0  81.81  1.0    bowled     1  v Sri Lanka  Colombo (RPS)
4    31  46   3   1  67.39  1.0       lbw     2  v Sri Lanka  Colombo (RPS)

  Start Date
0  18-Aug-08
1  20-Aug-08
2  24-Aug-08
3  27-Aug-08
4  29-Aug-08
```

In [4]:
```
print(data.isnull().sum())
```

```
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
```

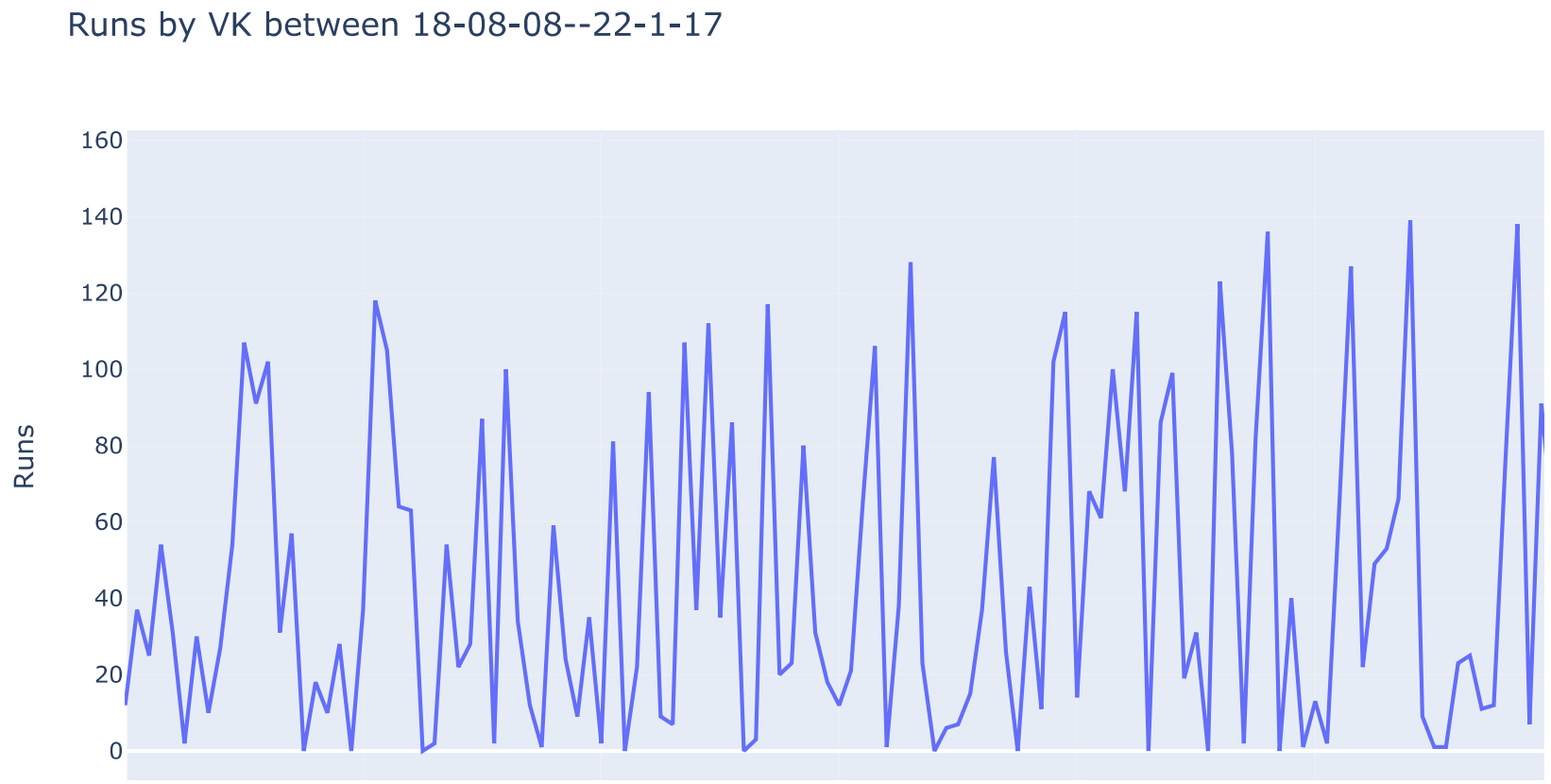
In [5]:
```
data["Runs"].sum()
```

Out[5]: 6184

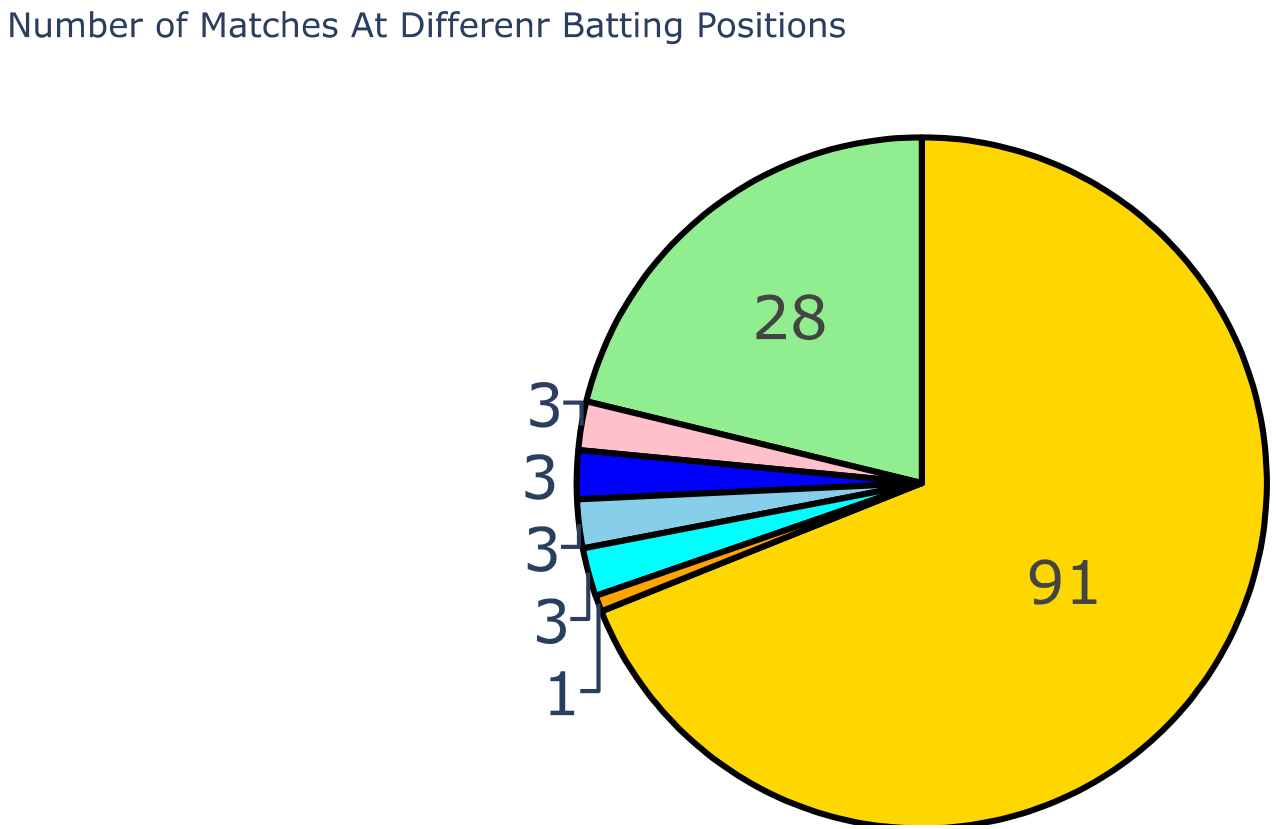
In [6]:
```
data["Runs"].mean()
```

Out[6]: 46.84848484848485

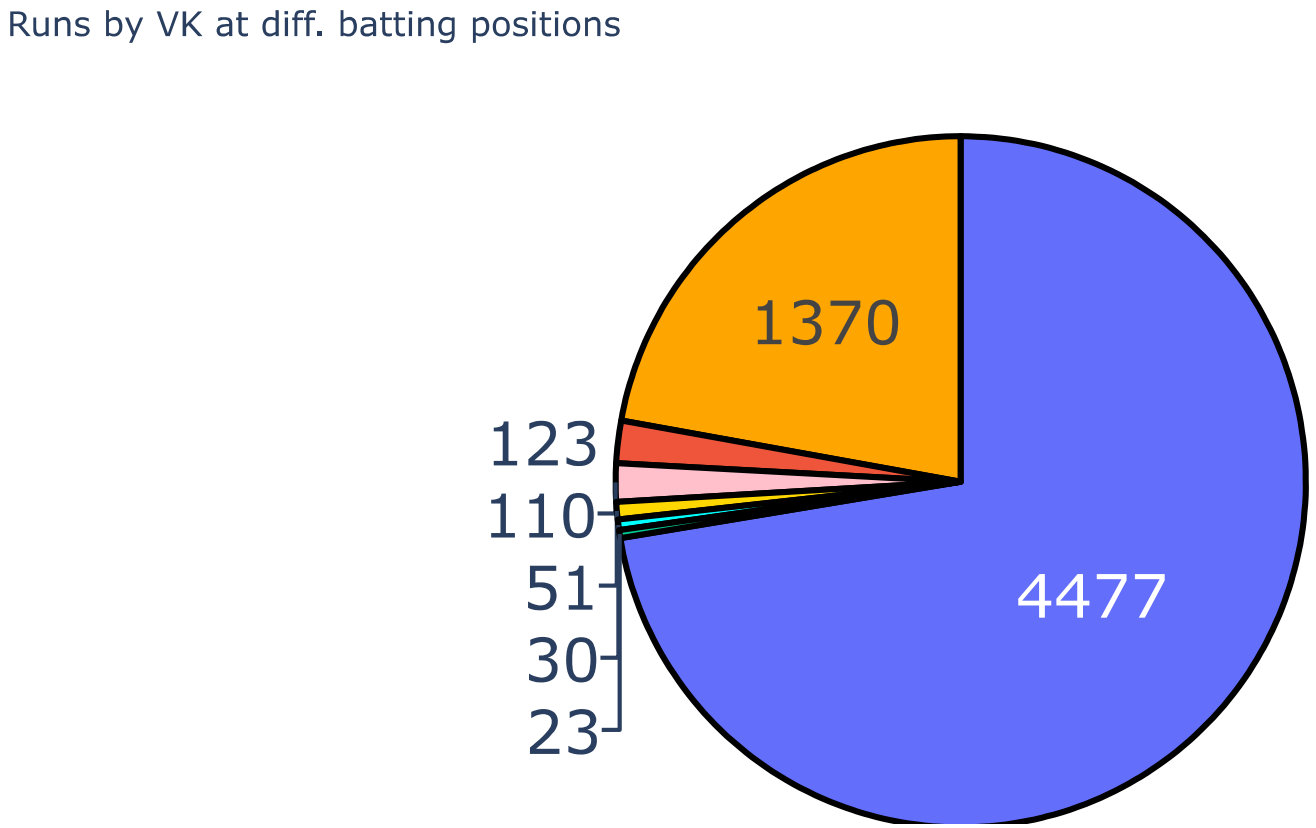
In [10]:
```
matches = data.index
figure = px.line(data,x=matches,y="Runs",title="Runs by VK between 18-08-08--22-1-17")
figure.show()
```



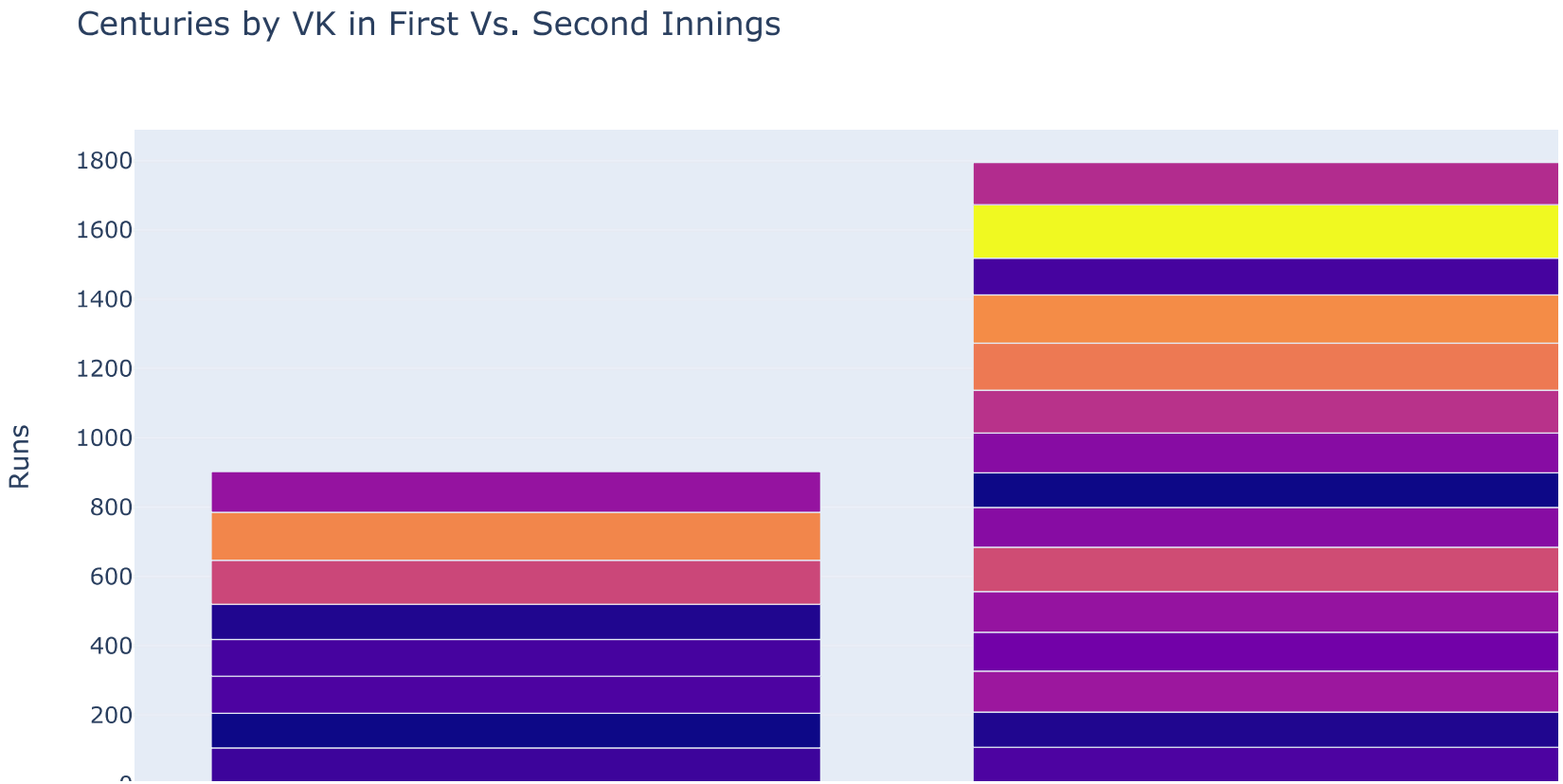
In [14]:
```
Pos=data['Pos'].value_counts()
label=Pos.index
counts=Pos.values
colors=['gold','lightgreen','pink','blue','skyblue','cyan','orange']
fig=go.Figure(data=[go.Pie(labels=label,values=counts)])
fig.update_layout(title_text='Number of Matches At Differenr Batting Positions')
fig.update_traces(hoverinfo='label+percent',textinfo='value',textfont_size=30,marker=dict(colors=colors,line=
fig.show()
```



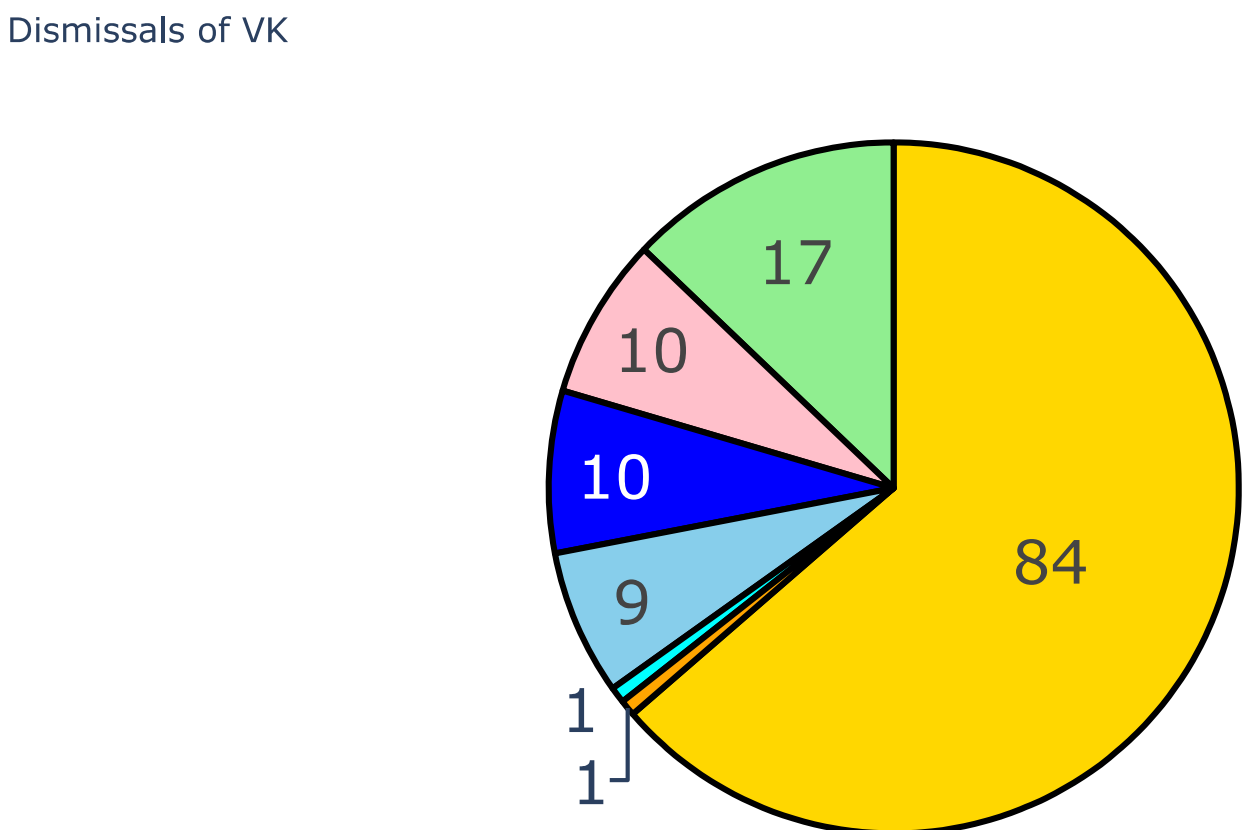
In [15]:
```
label=data['Pos']
counts=data['Runs']
colors=['gold','lightgreen','pink','blue','skyblue','cyan','orange']
fig=go.Figure(data=[go.Pie(labels=label,values=counts)])
fig.update_layout(title_text='Runs by VK at diff. batting positions')
fig.update_traces(hoverinfo='label+percent',textinfo='value',textfont_size=30,marker=dict(colors=colors,line=
fig.show()
```



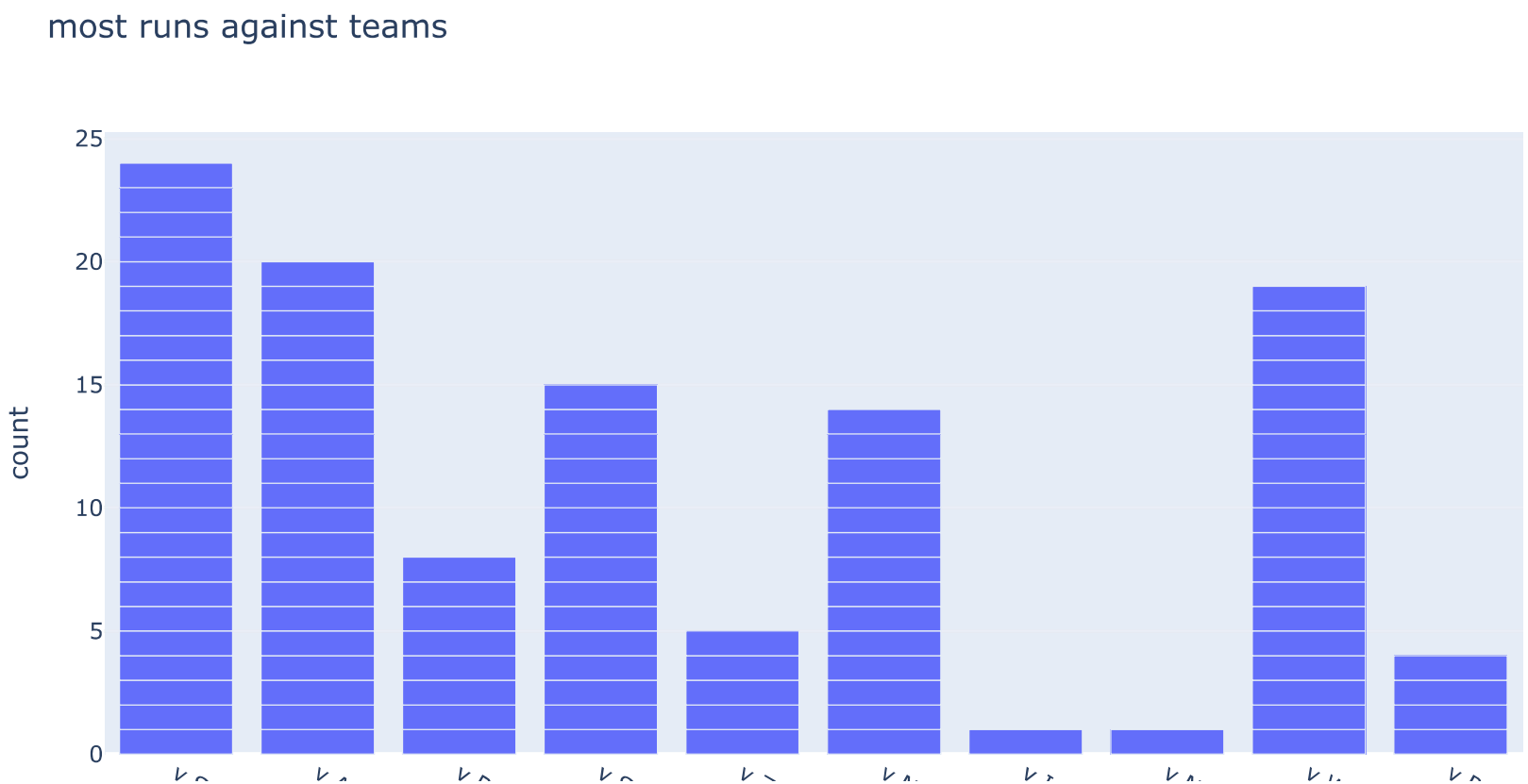
In [16]:
```
centuries=data.query("Runs>=100")
figure=px.bar(centuries,x=centuries['Inns'],y=centuries['Runs'],color=centuries['Runs'],title='Centuries by V
figure.show()
```



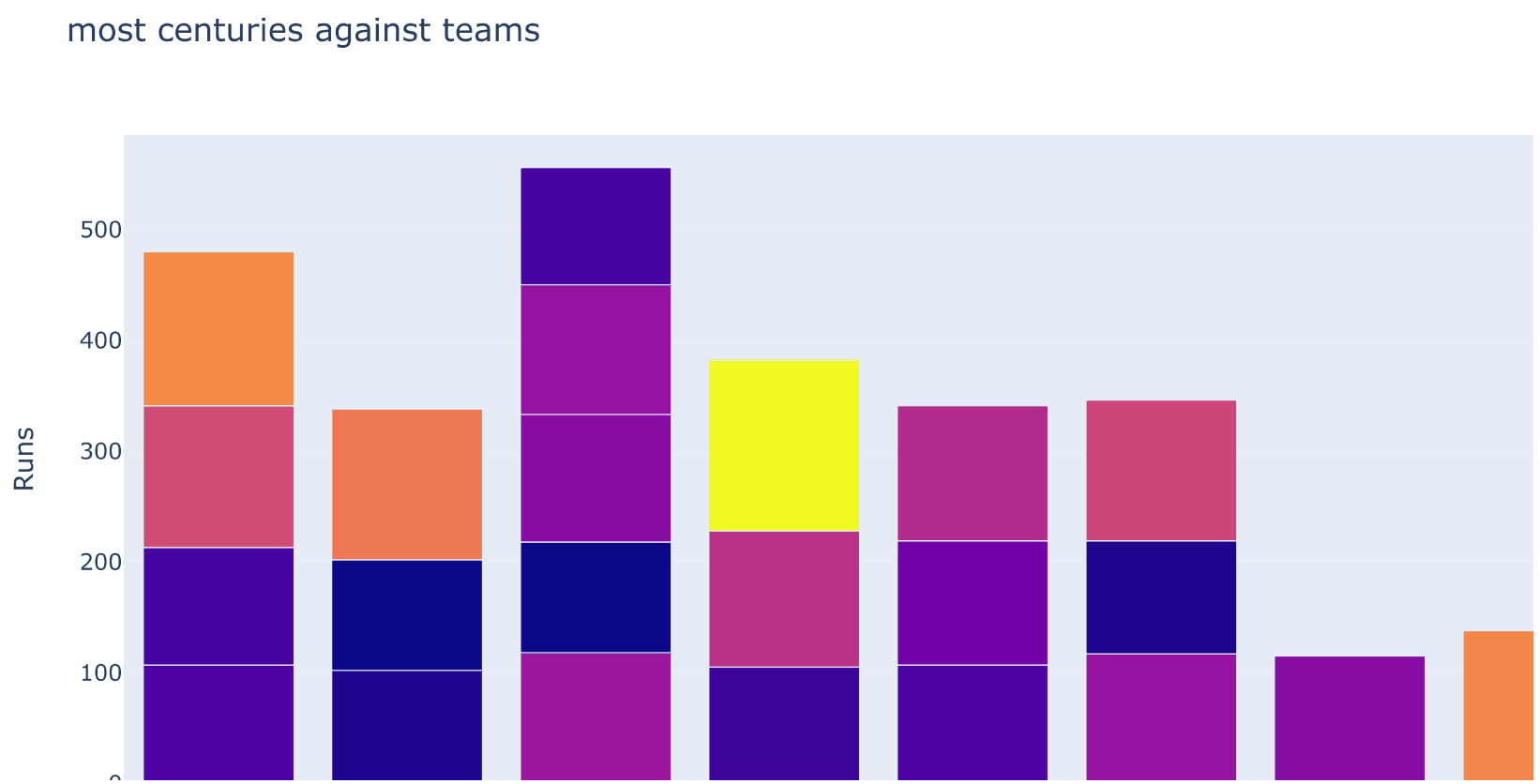
In [17]:
```
dismissal= data['Dismissal'].value_counts()
label= dismissal.index
counts= dismissal.values
colors= ['gold','lightgreen','pink','blue','skyblue','cyan','orange']
fig= go.Figure(data=[go.Pie(labels=label,values=counts)])
fig.update_layout(title_text='Dismissals of VK')
fig.update_traces(hoverinfo='label+percent',textinfo='value',textfont_size=30,marker=dict(colors=colors,line=
fig.show()
```



In [18]:
```
fig = px.bar(data,x=data['Opposition'],title="most runs against teams")
fig.show()
```



In [19]:
```
fig= px.bar(centuries,x=centuries['Opposition'],y=centuries['Runs'],color=centuries['Runs'],title='most centu
fig.show()
```

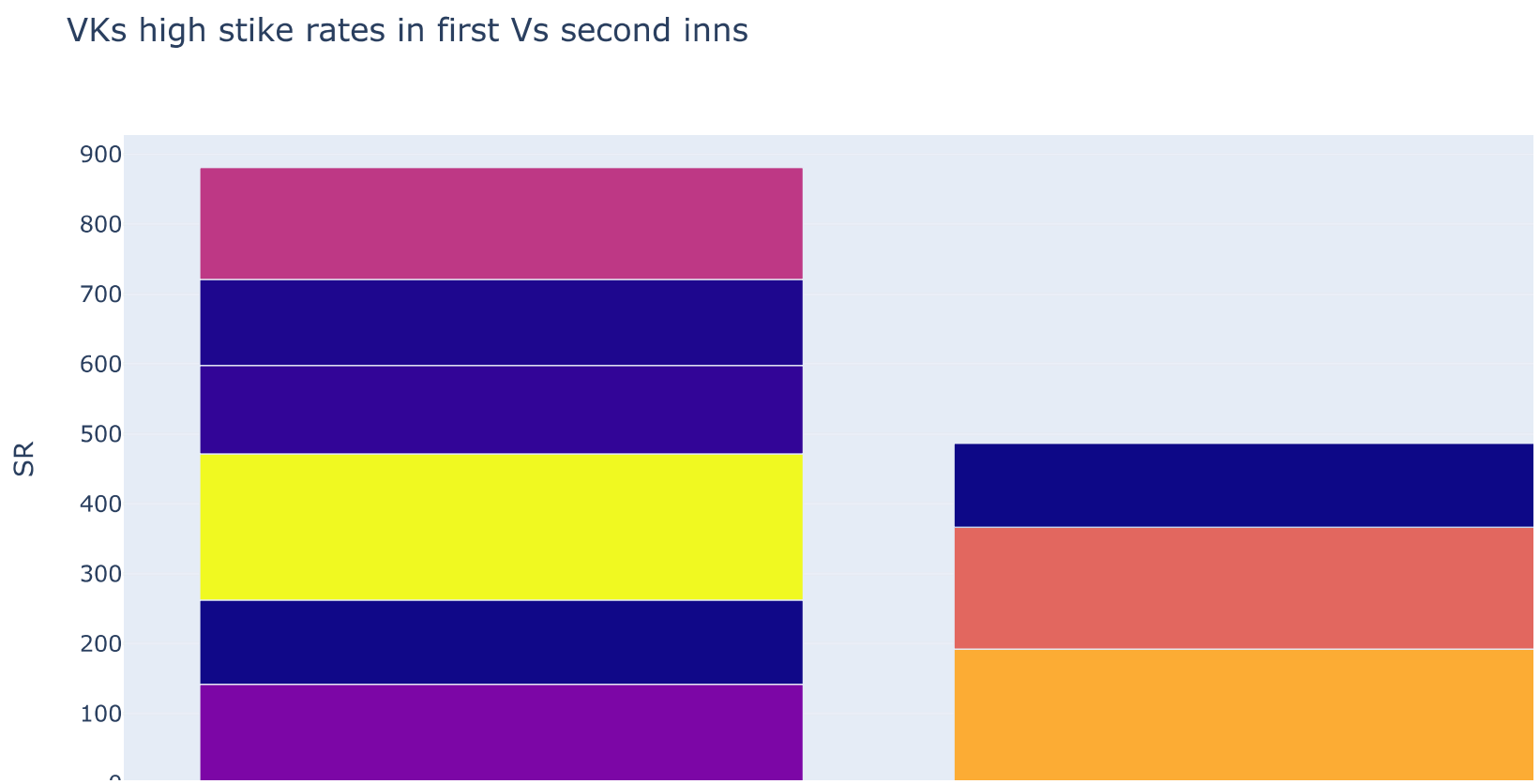


In [20]:
```
strike_rate=data.query('SR>=120')
print(strike_rate)
```

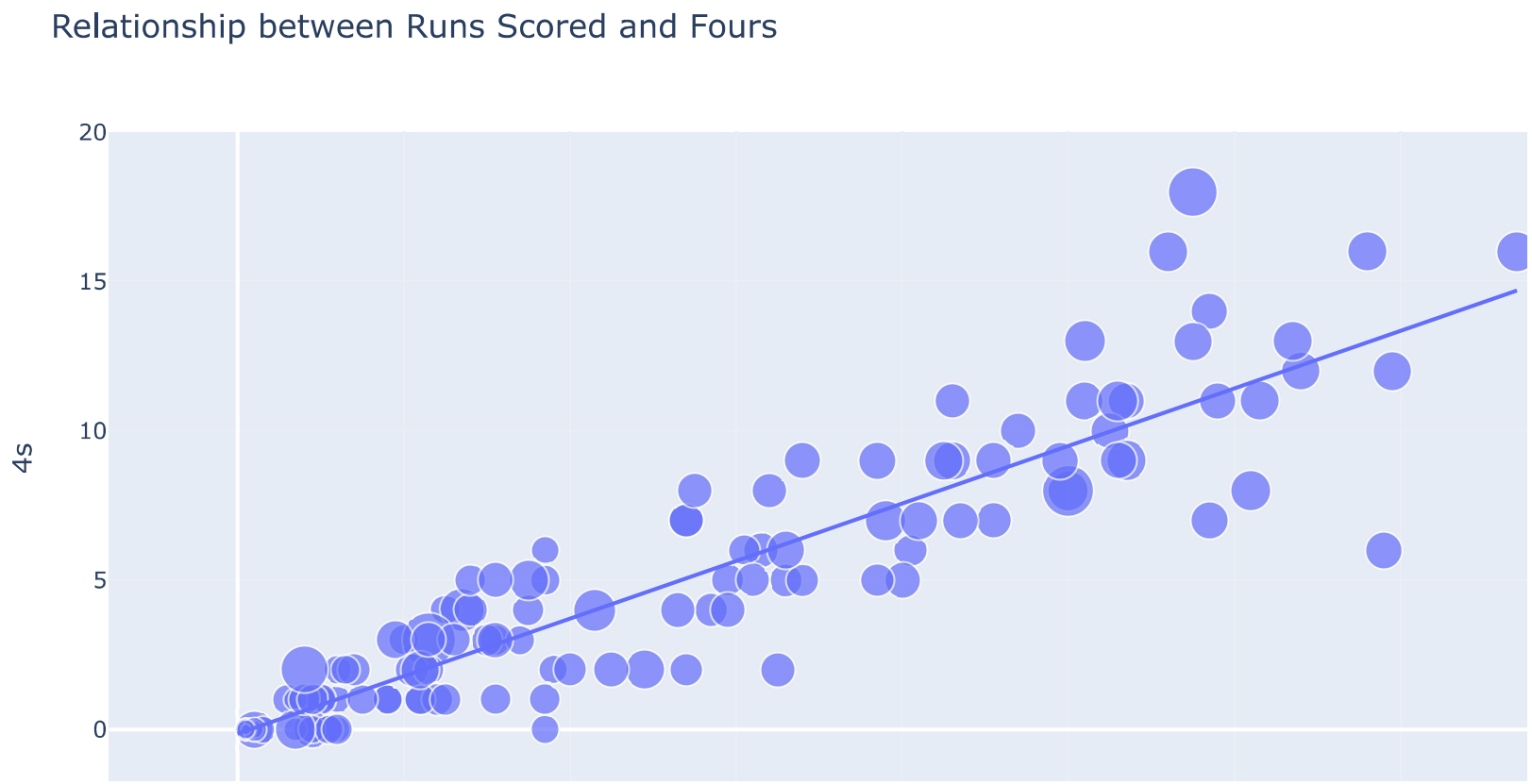
```
     Runs  BF  4s  6s      SR  Pos Dismissal  Inns     Opposition  \
8      27  19   4   0  142.10  7.0    bowled     1    v Sri Lanka
32    100  83   8   2  120.48  4.0   not out     1   v Bangladesh
56     23  11   3   0  209.09  6.0   not out     1  v West Indies
76     43  34   4   1  126.47  3.0    caught     1      v England
78    102  83  13   2  122.89  3.0    caught     1  v West Indies
83    100  52   8   7  192.30  3.0   not out     2    v Australia
85    115  66  18   1  174.24  3.0   not out     2    v Australia
93     78  65   7   2  120.00  3.0    caught     2  v New Zealand
130     8   5   2   0  160.00  3.0    caught     1      v England

            Ground Start Date
8           Rajkot  15-Dec-09
32           Dhaka  19-Feb-11
56          Indore   8-Dec-11
76      Birmingham  23-Jun-13
78   Port of Spain   5-Jul-13
83          Jaipur  16-Oct-13
85          Nagpur  30-Oct-13
93        Hamilton  22-Jan-14
130        Cuttack  19-Jan-17
```

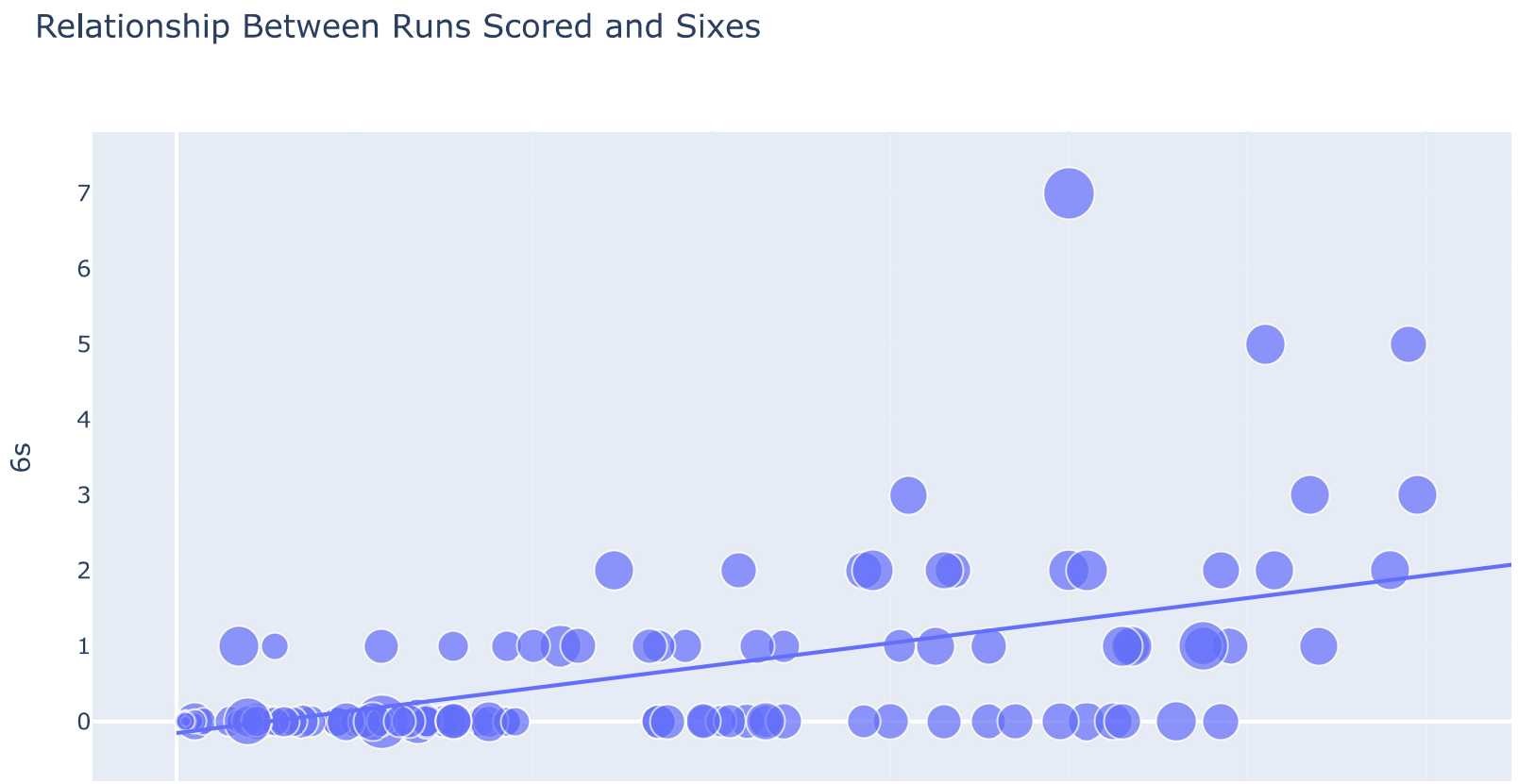
In [21]:
```
fig=px.bar(strike_rate,x=strike_rate['Inns'],y=strike_rate['SR'],color=strike_rate['SR'],title="VKs high stik
fig.show()
```



In [24]:
```
fig= px.scatter(data_frame=data,x="Runs",y='4s',size='SR',trendline='ols',title='Relationship between Runs Sc
fig.show()
```



In [25]:
```
fig=px.scatter(data_frame=data,x='Runs',y='6s',size='SR',trendline='ols',title='Relationship Between Runs Sco
fig.show()
```



In [ ]: