

## Plotly

```
In [ ]: # pip install plotly
```

```
In [145]: import pandas as pd
df = pd.read_csv('iris.csv')
df.sample()
```

```
Out[145]:
```

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
13	14	4.3	3.0	1.1	0.1	Iris-setosa

```
In [146]: df.sample()
```

```
Out[146]:
```

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
93	94	5.0	2.3	3.3	1.0	Iris-versicolor

```
In [147]: import plotly.express as px
```

```
In [148]: df1 = px.data.iris()
```

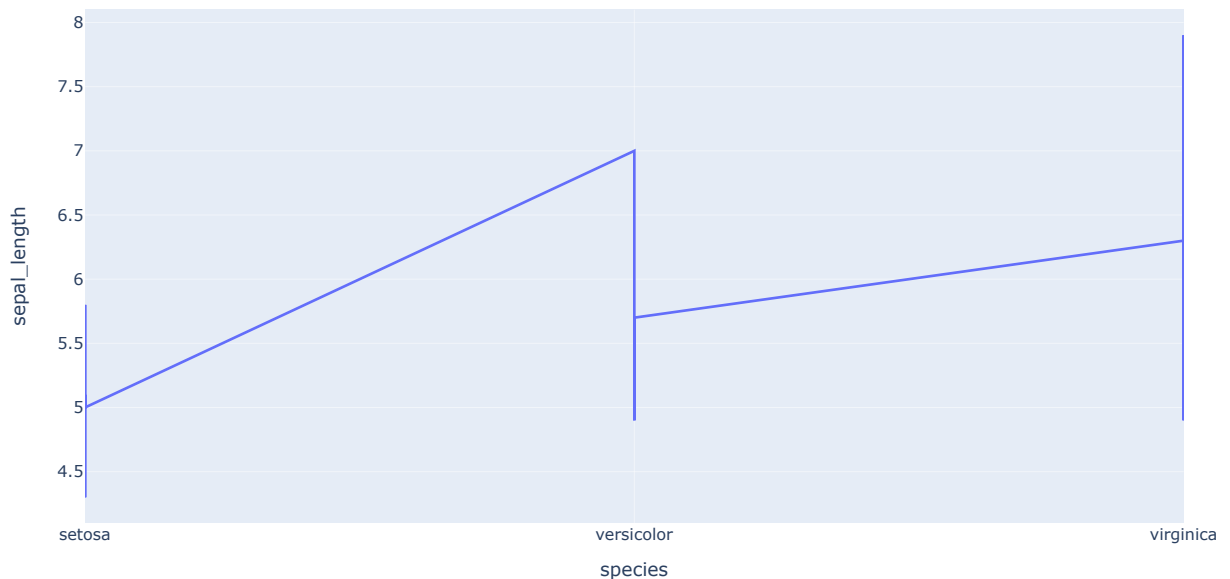
```
In [149]: df1.sample()
```

```
Out[149]:
```

	sepal_length	sepal_width	petal_length	petal_width	species	species_id
137	6.4	3.1	5.5	1.8	virginica	3

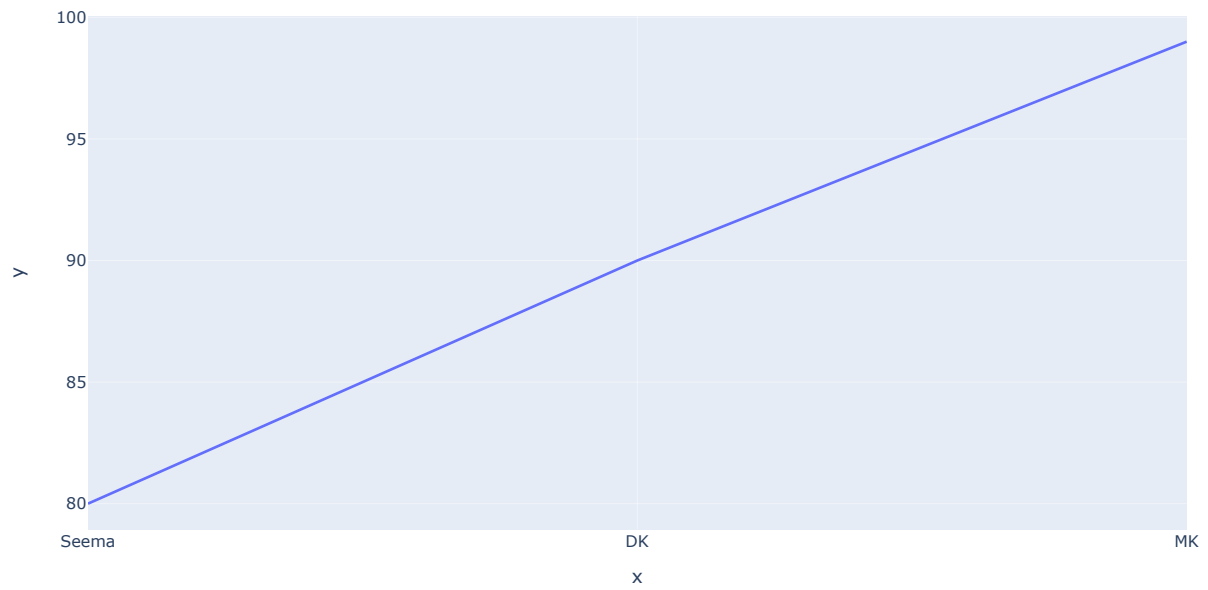
```
In [150]: a = px.line(df1, x='species', y='sepal_length')
```

```
In [151]: a.show()
```

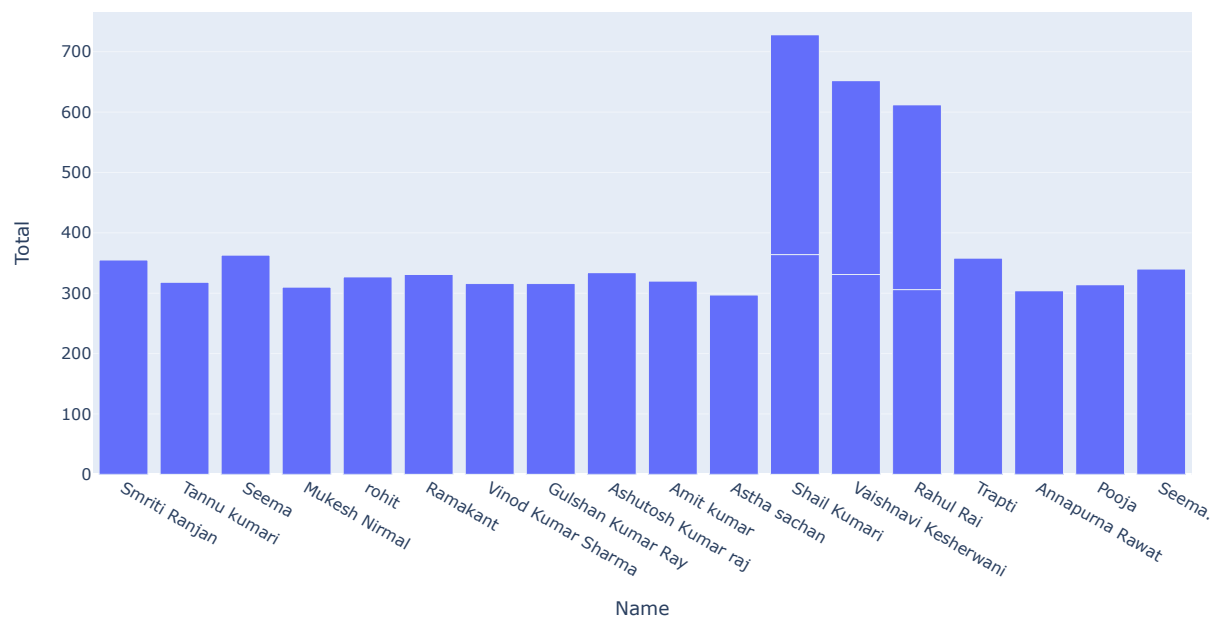


```
In [152]: import pandas as pd
df = pd.read_csv('marks1.csv')
df['Total'] = df['English'] + df['Hindi'] + df['Maths'] + df['Social Science']
```

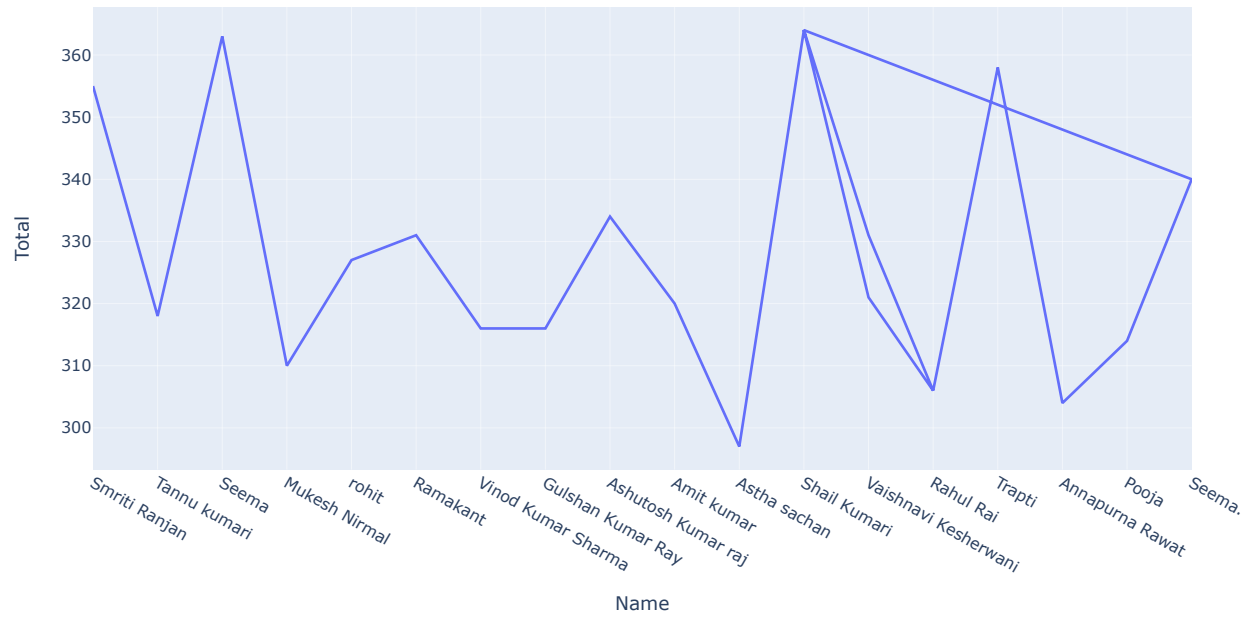
```
In [153]: px.line(x=['Seema', 'DK', 'MK'], y=[80,90,99])
```



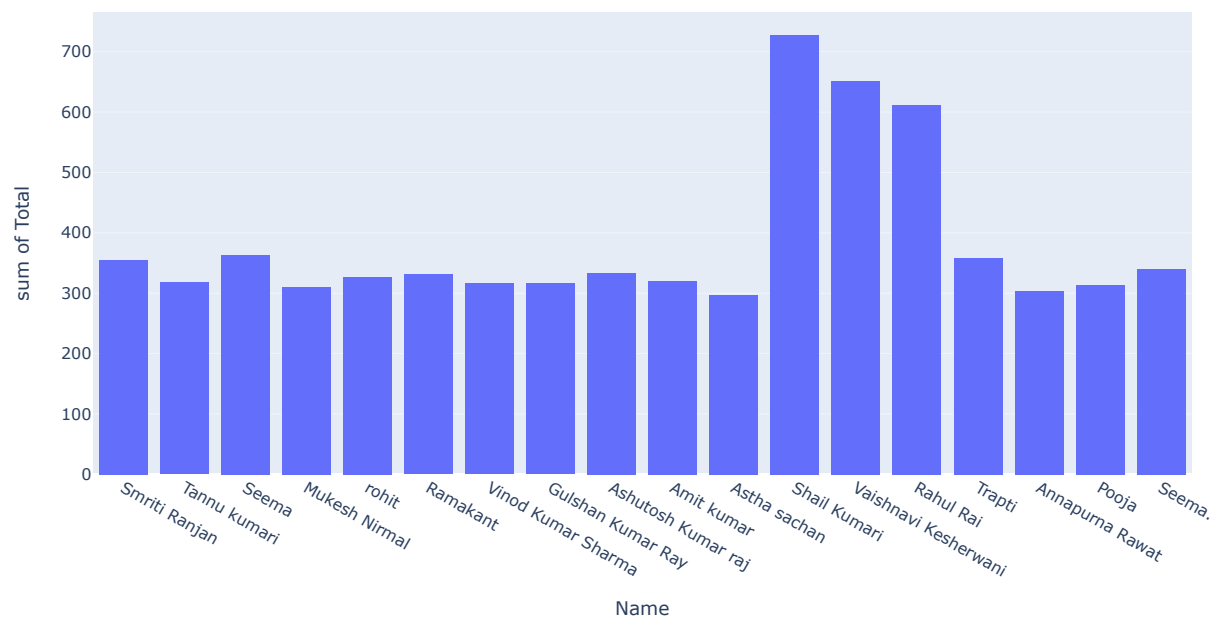
```
In [154]: px.bar(df ,x='Name', y = 'Total')
```



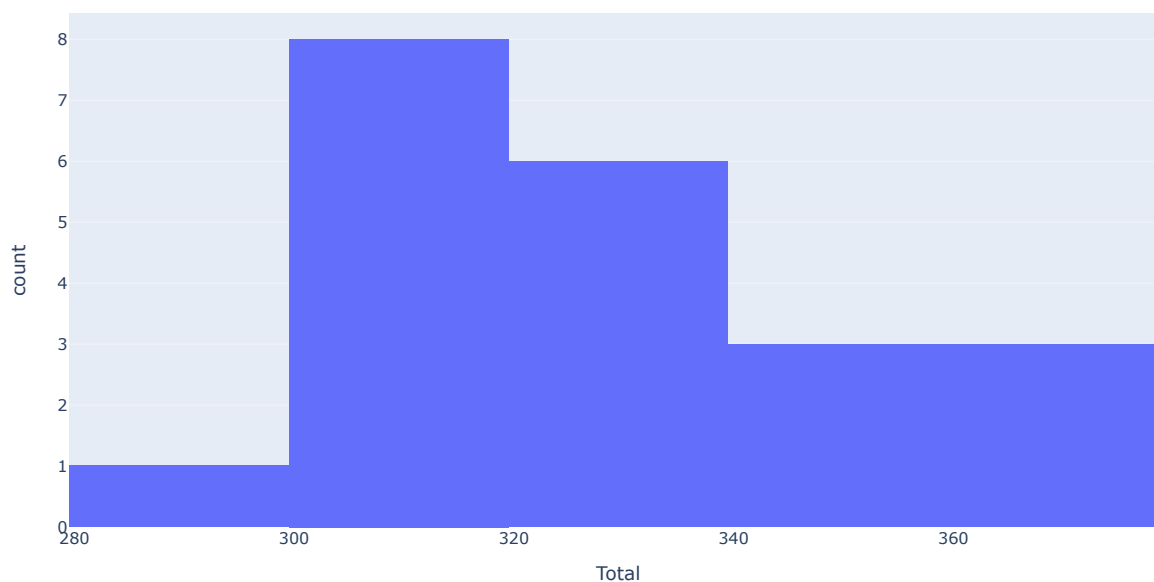
```
In [155]: px.line(df ,x='Name', y ='Total')
```



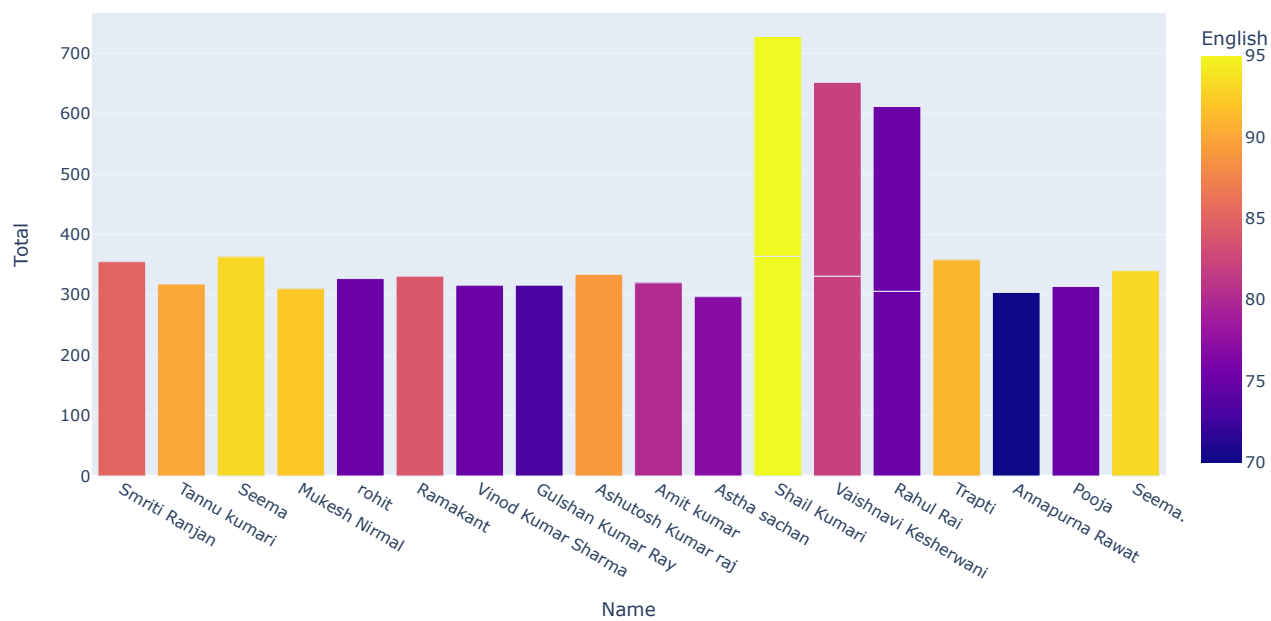
```
In [156]: px.histogram(df ,x='Name', y ='Total')
```



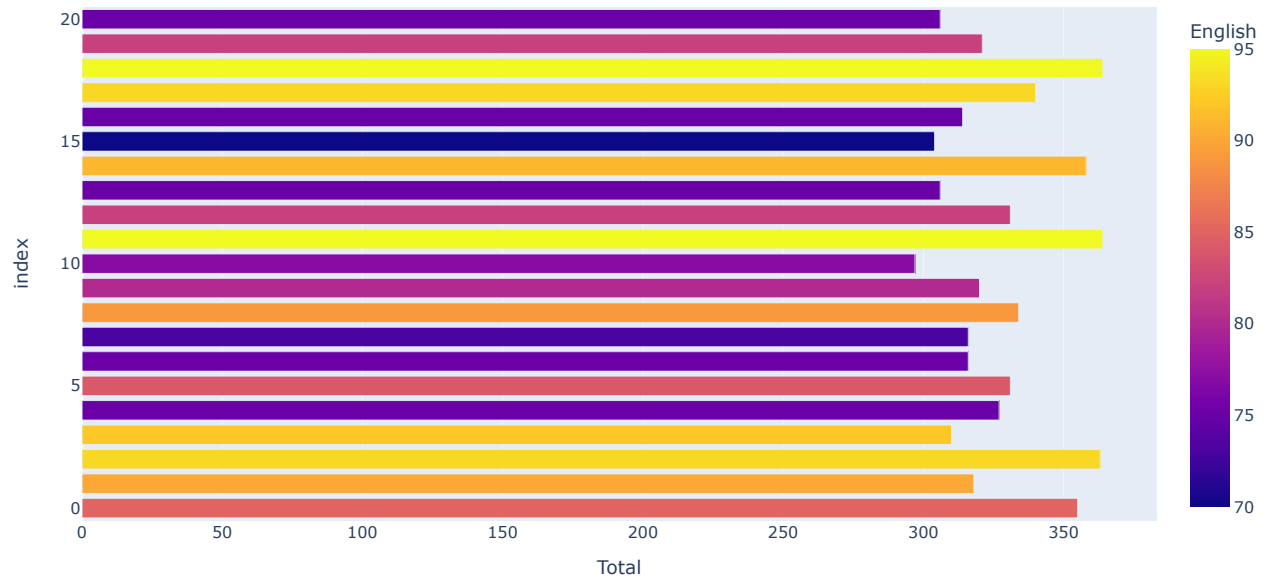
```
In [157]: # frequency Distribtuion  
px.histogram(df ,x ='Total')
```



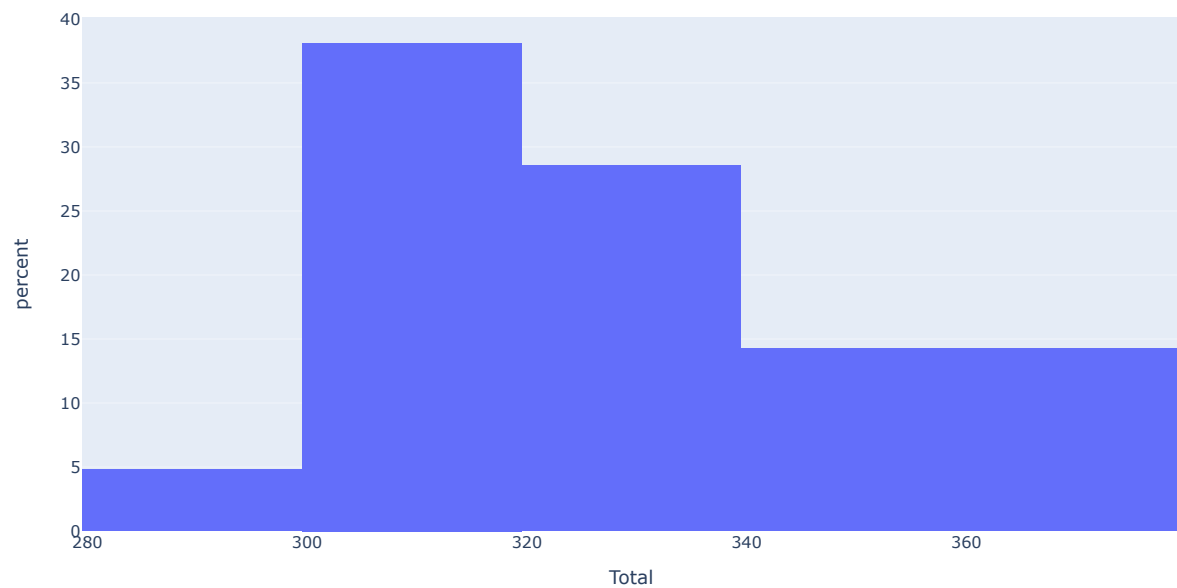
```
In [158]: px.bar(df ,x='Name', y ='Total', color='English')
```



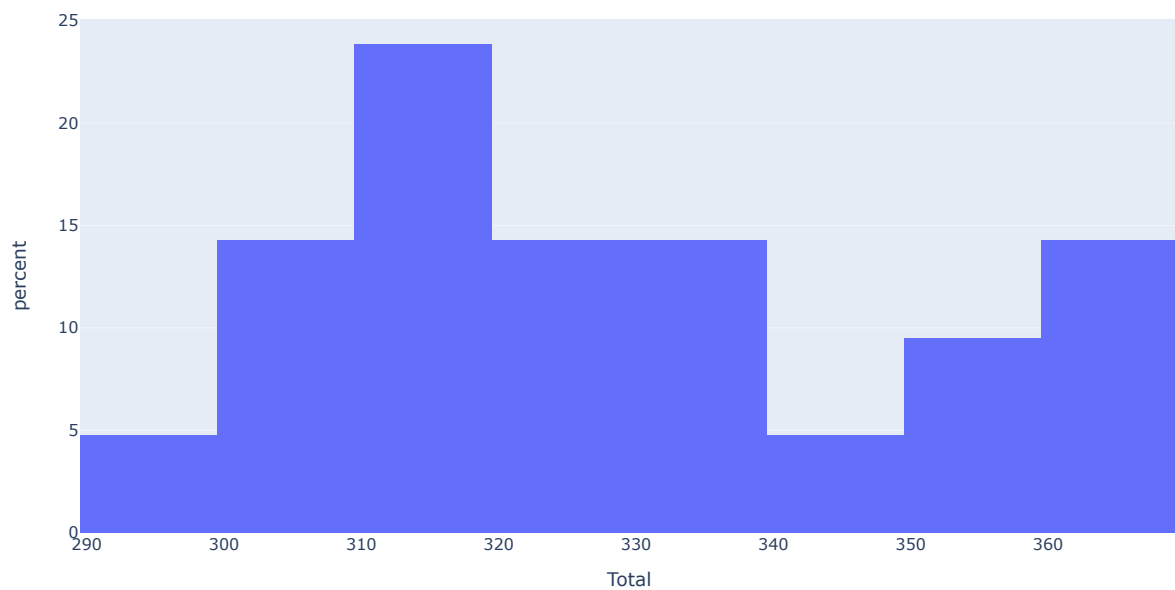
```
In [159]: px.bar(df,x='Total', color='English')
```



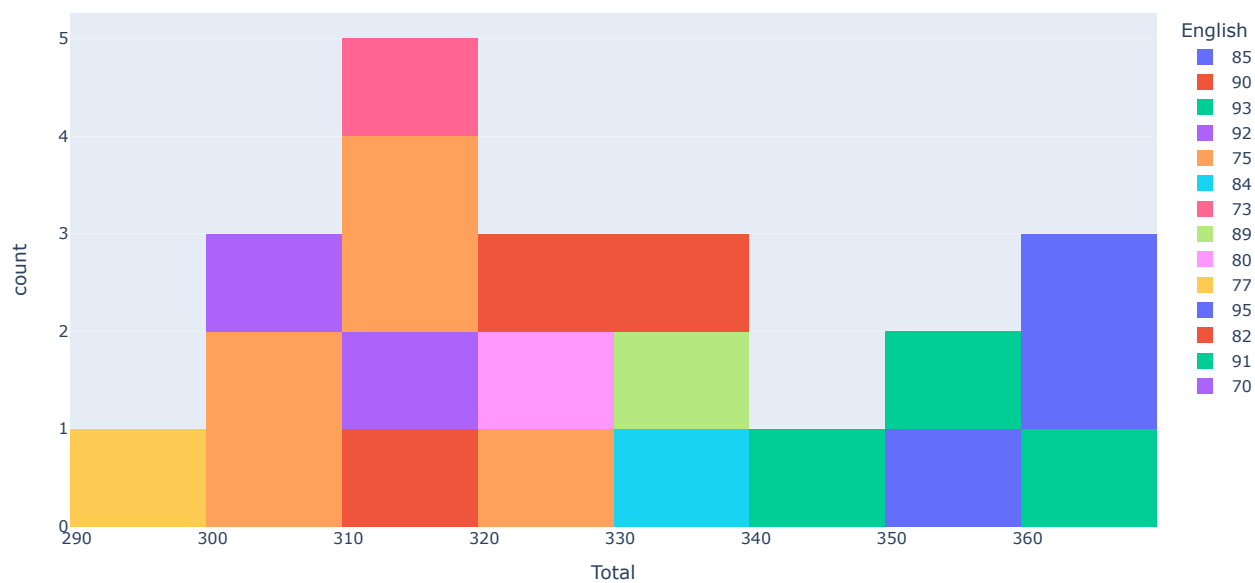
```
In [160]: px.histogram(df , x='Total', histnorm='percent')
```



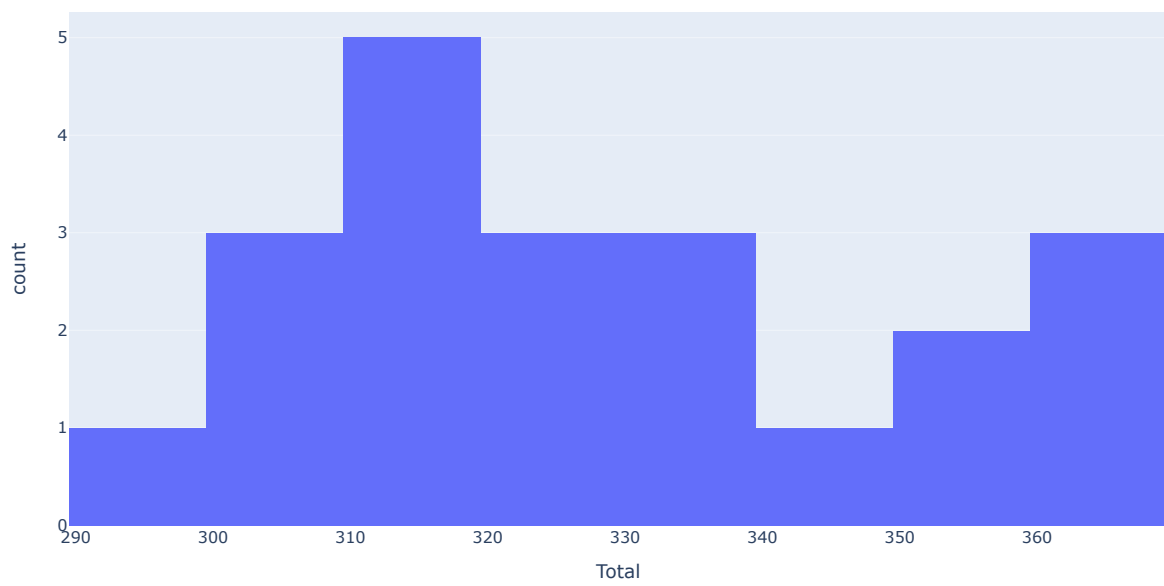
```
In [161]: # Bin Distrubtion/  
px.histogram(df , x='Total', histnorm='percent', nbins=10)
```



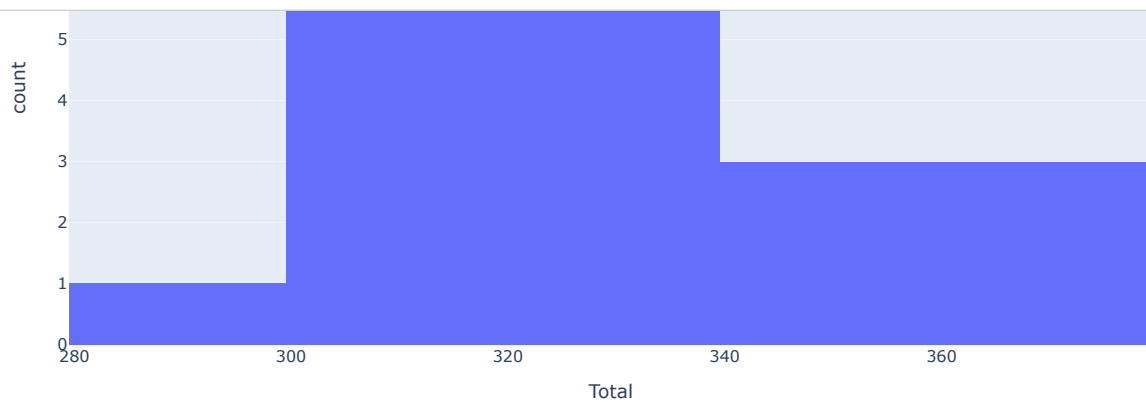
```
In [162]: px.histogram(df , x='Total', nbins=10, color='English')
```



```
In [163]: px.histogram(df , x='Total', nbins=10)
```



```
In [164]: px.histogram(df , x='Total')
```



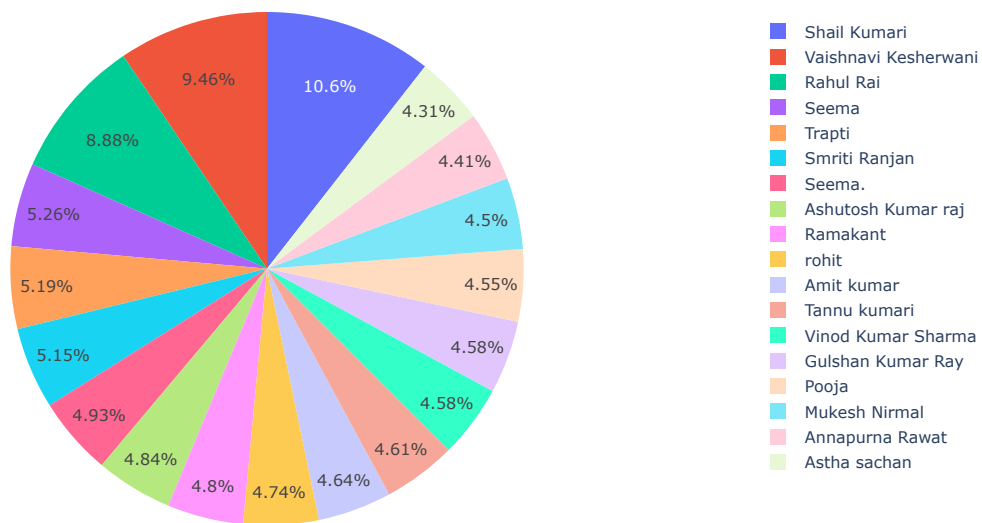
```
In [165]: df2 = px.data.tips()
df2.sample()
```

Out[165]:

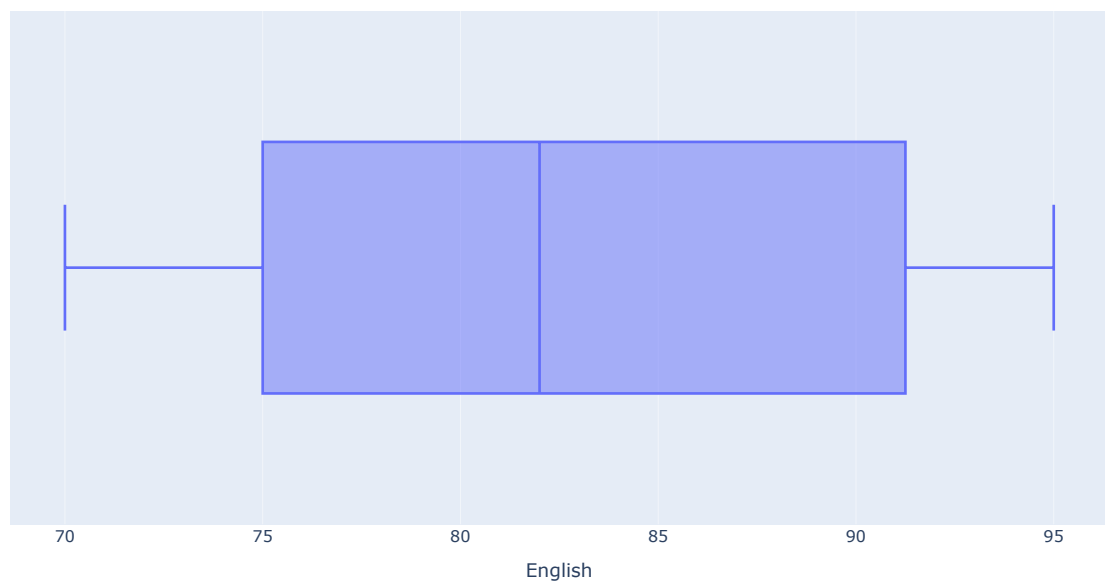
	total_bill	tip	sex	smoker	day	time	size
197	43.11	5.0	Female	Yes	Thur	Lunch	4

```
In [173]: px.scatter(df, x='Total', color='Name', size='Name')
```

```
In [167]: px.pie(df, values='Total', names='Name')
```

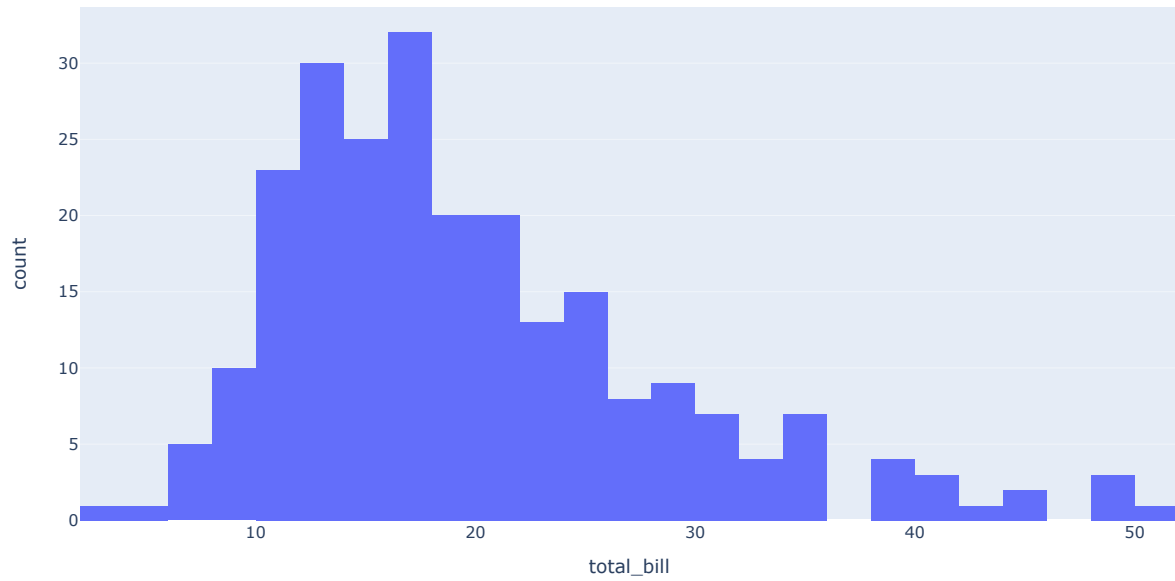


```
In [168]: # Box is using for outliers
px.box(df, x='Total')
px.box(df, x='English')
```

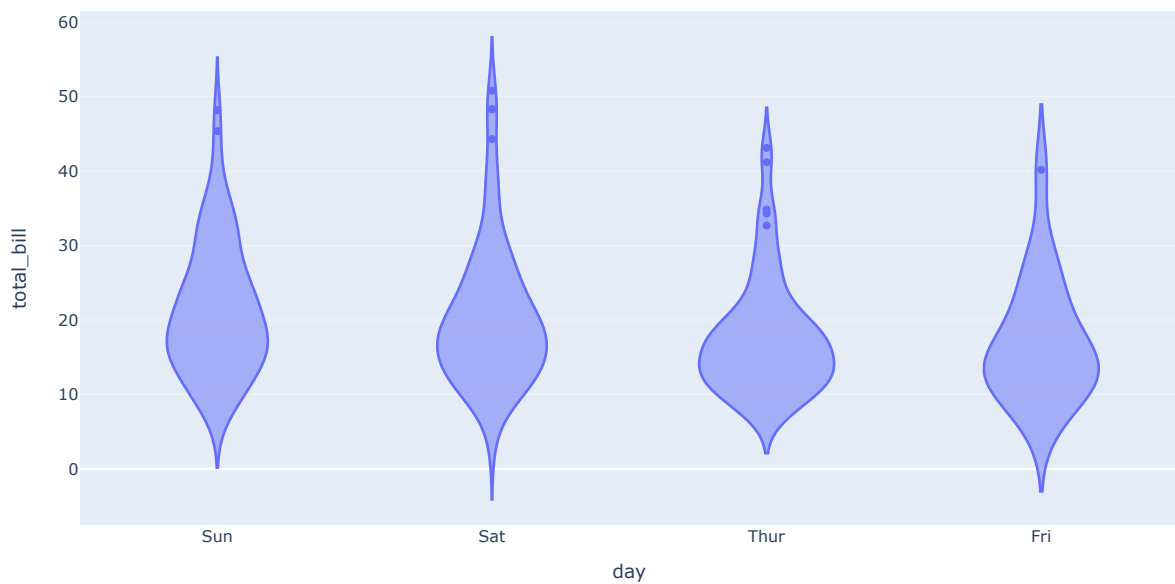




```
In [169]: px.histogram(df2, x='total_bill')
```



```
In [170]: px.violin(df2,x='day', y = 'total_bill')
```

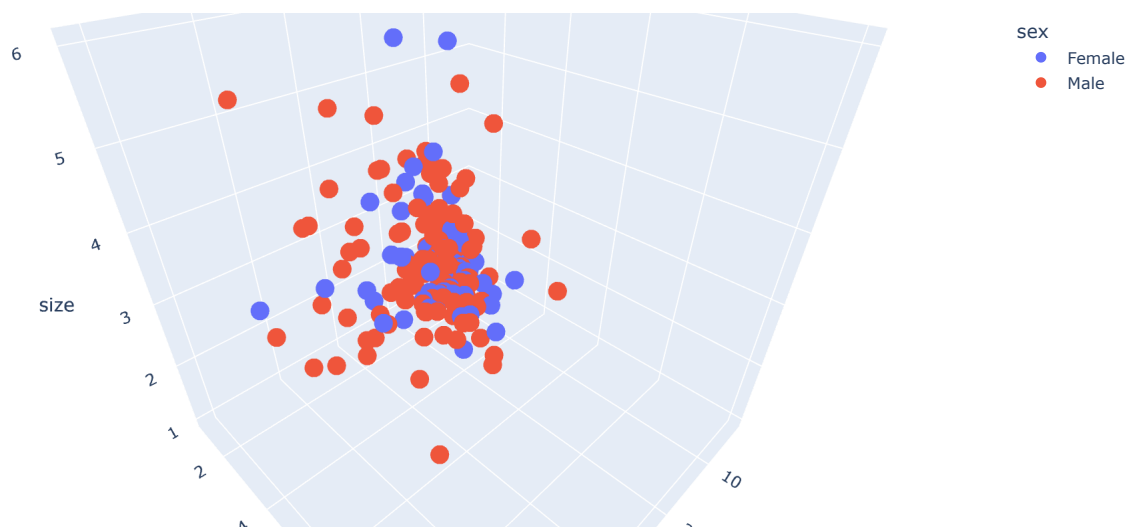


```
In [171]: df2.sample()
```

```
Out[171]:
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	total_bill	tip	sex	smoker	day	time	size
120	11.69	2.31	Male	No	Thur	Lunch	2

```
In [172]: # 3d Ploting --->
px.scatter_3d(df2, x='total_bill', y='tip', z='size', color='sex')
```



```
In [ ]:
```