

Drawing Plot on base of data_viz

```
In [ ]: # import liberay of seaborn, matplotlib, pandas and numpy
import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd
import numpy as np
```

Load data set of data_viz.csv

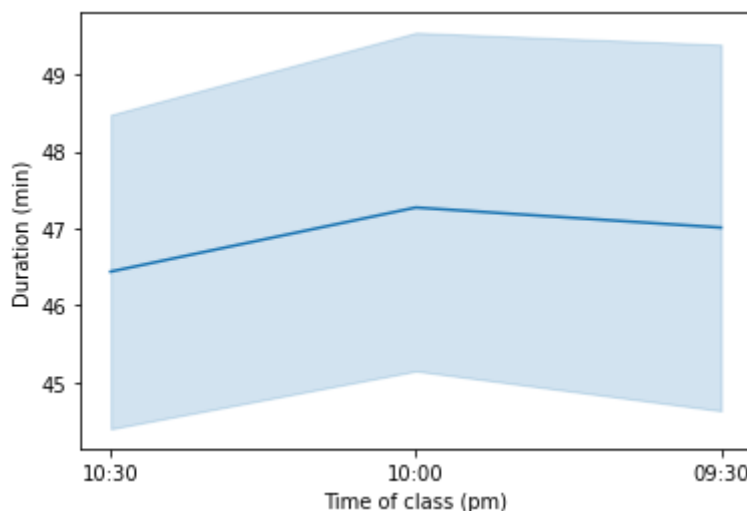
```
In [ ]: data_viz = pd.read_csv("data_viz.csv")
data_viz.head()
```

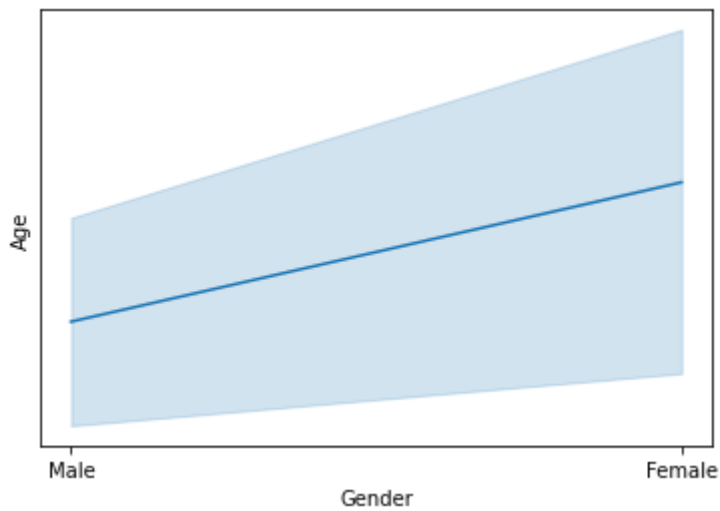
```
Out[ ]:      Timestamp  Gender  Age  Location  Time of class (pm)  Duration (min)
0  1/3/2022 19:09:29   Male  16-30  Pakistan             10:30             60
1  1/3/2022 19:09:33   Male  16-30  Pakistan             10:00             60
2  1/3/2022 19:09:33   Male  16-30  Pakistan             10:00             30
3  1/3/2022 19:09:33   Male  30-40  Pakistan             09:30             30
4  1/3/2022 19:09:34   Male  16-30    East             09:30             60
```

1. For Line Plot

Not so much usable as no such continues data

```
In [ ]: sns.lineplot(x = 'Time of class (pm)', y = 'Duration (min)', data= data_viz) # this p
plt.show()
sns.lineplot(x = 'Gender', y = 'Age', data= data_viz) # this plot always b/w two numi
plt.show()
```



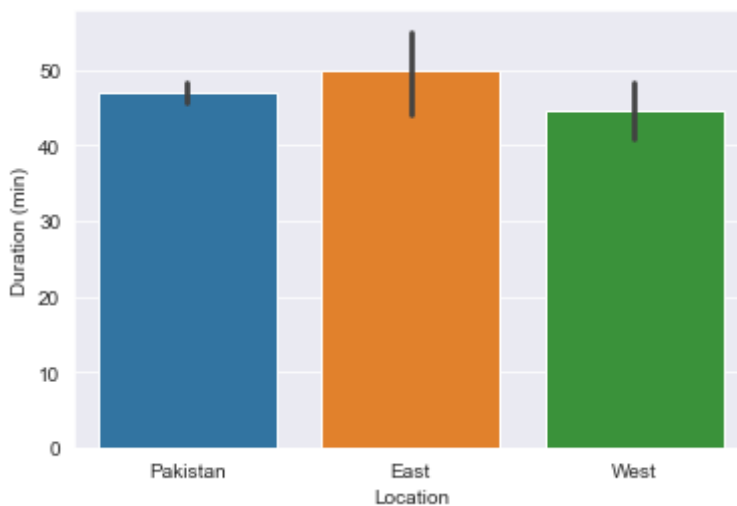


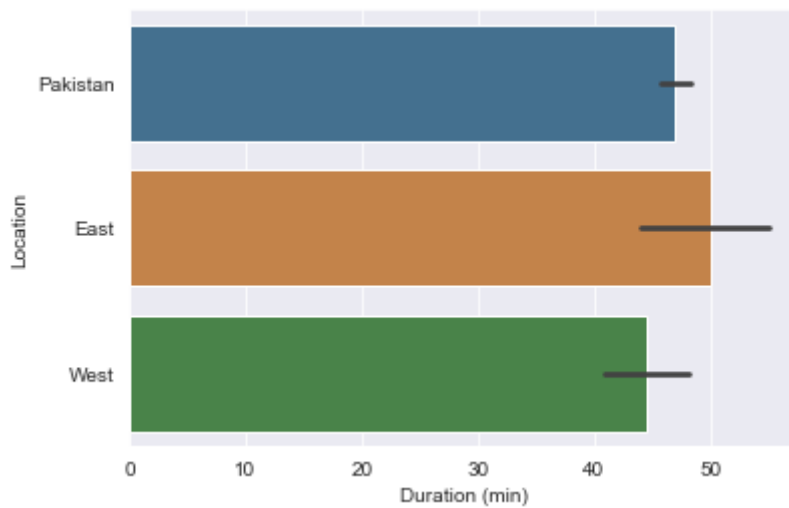
2. For Bar Plot

```
In [ ]: # Load data Set
data_viz = pd.read_csv("data_viz.csv")
data_viz.head()
```

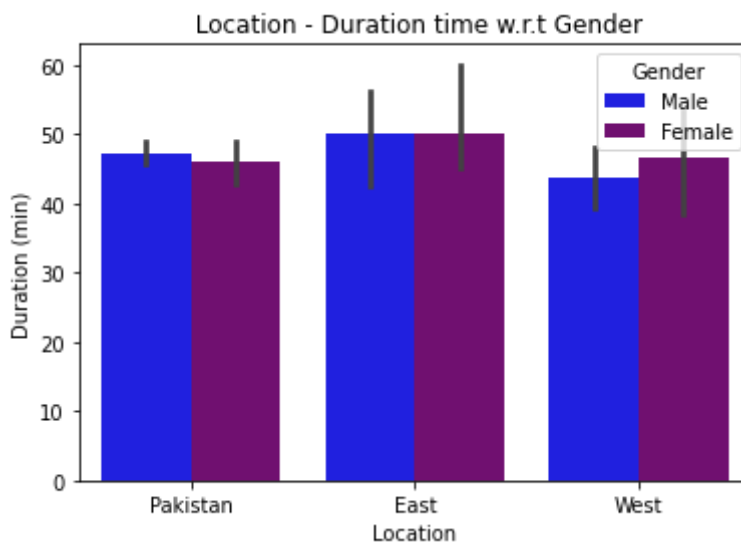
```
Out[ ]:   Timestamp  Gender  Age  Location  Time of class (pm)  Duration (min)
0  1/3/2022 19:09:29   Male  16-30  Pakistan           10:30           60
1  1/3/2022 19:09:33   Male  16-30  Pakistan           10:00           60
2  1/3/2022 19:09:33   Male  16-30  Pakistan           10:00           30
3  1/3/2022 19:09:33   Male  30-40  Pakistan           09:30           30
4  1/3/2022 19:09:34   Male  16-30    East           09:30           60
```

```
In [ ]: # Barplot will carry on only numeric data on an axis
sns.set_style("darkgrid")
sns.barplot( x ='Location',y="Duration (min)", data = data_viz)
plt.show()
sns.barplot( x = "Duration (min)", y='Location', saturation= 0.5 , data = data_viz)
plt.show()
```

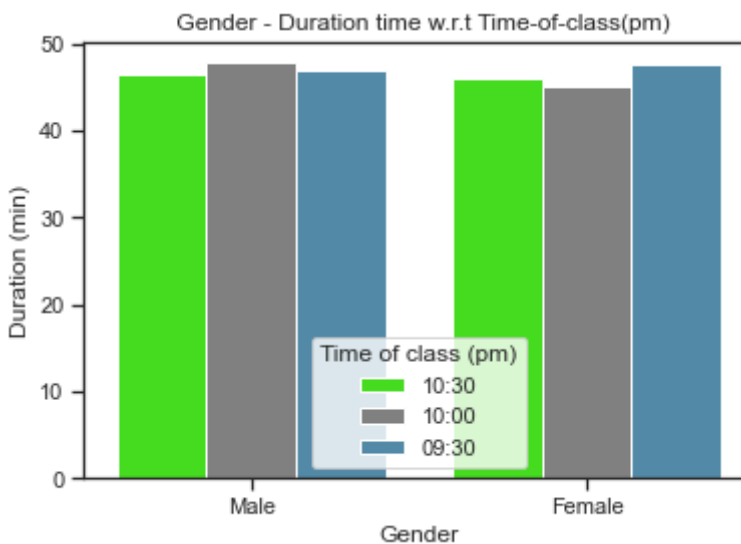




```
In [ ]: sns.barplot( x ='Location',y="Duration (min)", hue= "Gender", palette={"purple", "blue"}, data = data_v)
plt.title(" Location - Duration time w.r.t Gender")
plt.show()
```



```
In [ ]: sns.barplot( x ='Gender',y="Duration (min)", hue= "Time of class (pm)", data = data_v)
plt.title(" Gender - Duration time w.r.t Time-of-class(pm)")
plt.show()
```

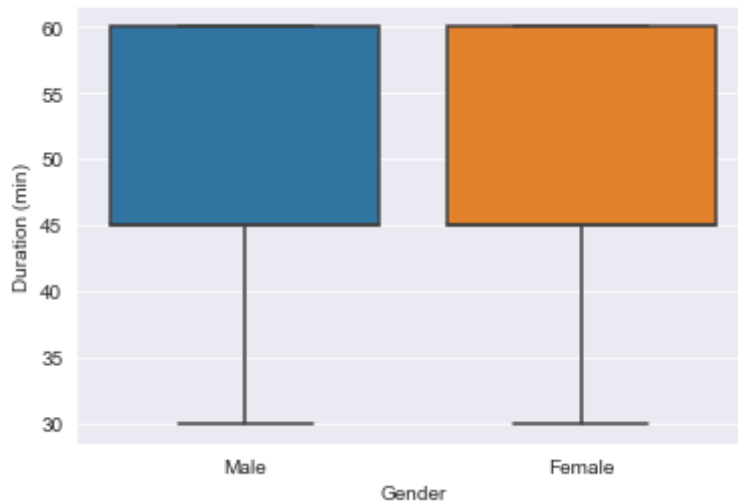


3. For Box Plot

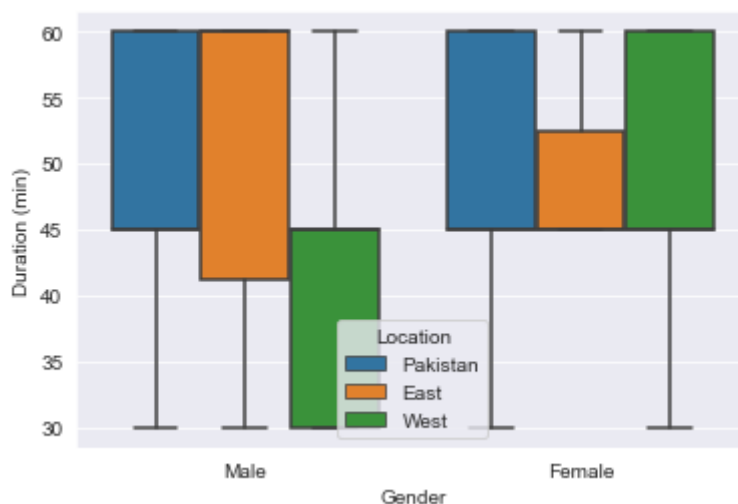
```
In [ ]: # Load data Set
data_viz = pd.read_csv("data_viz.csv")
data_viz.head(2)
```

```
Out[ ]:      Timestamp  Gender  Age  Location  Time of class (pm)  Duration (min)
0  1/3/2022 19:09:29   Male  16-30   Pakistan             10:30             60
1  1/3/2022 19:09:33   Male  16-30   Pakistan             10:00             60
```

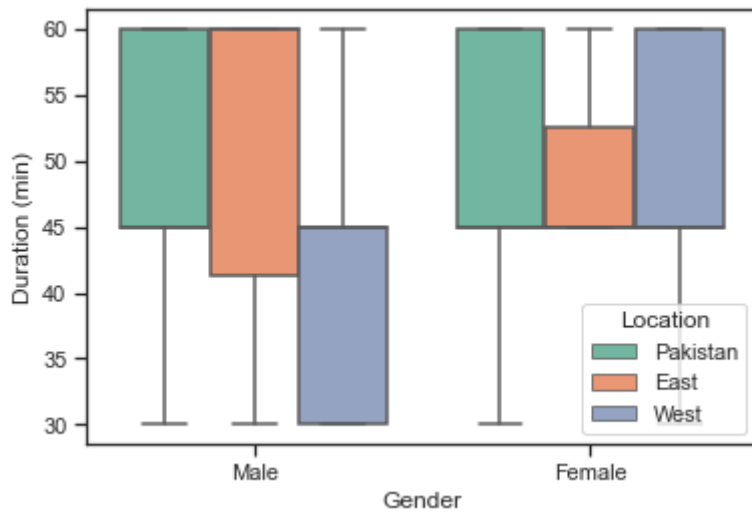
```
In [ ]: sns.boxplot( x = 'Gender' , y = 'Duration (min)', data = data_viz)
plt.show()
```



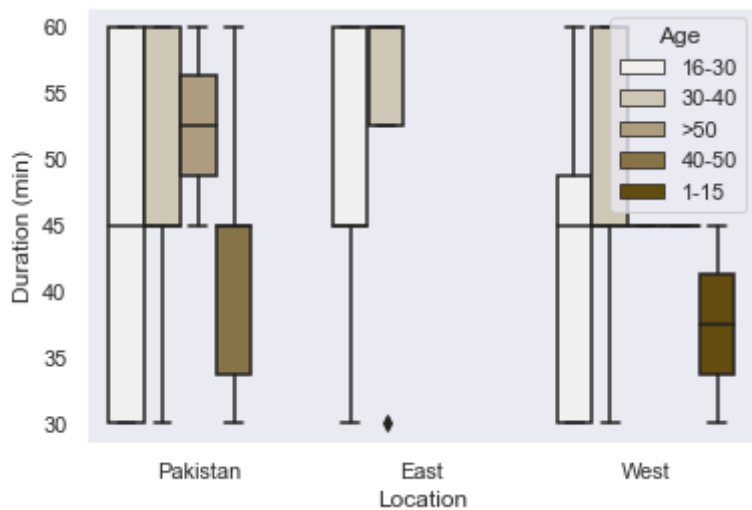
```
In [ ]: sns.boxplot( x = 'Gender' , y = 'Duration (min)', hue= "Location", data = data_viz)
plt.show()
```



```
In [ ]: sns.set_theme(style="ticks", color_codes=True)
sns.boxplot( x = 'Gender' , y = 'Duration (min)', hue= "Location", data = data_viz, p
plt.show()
```

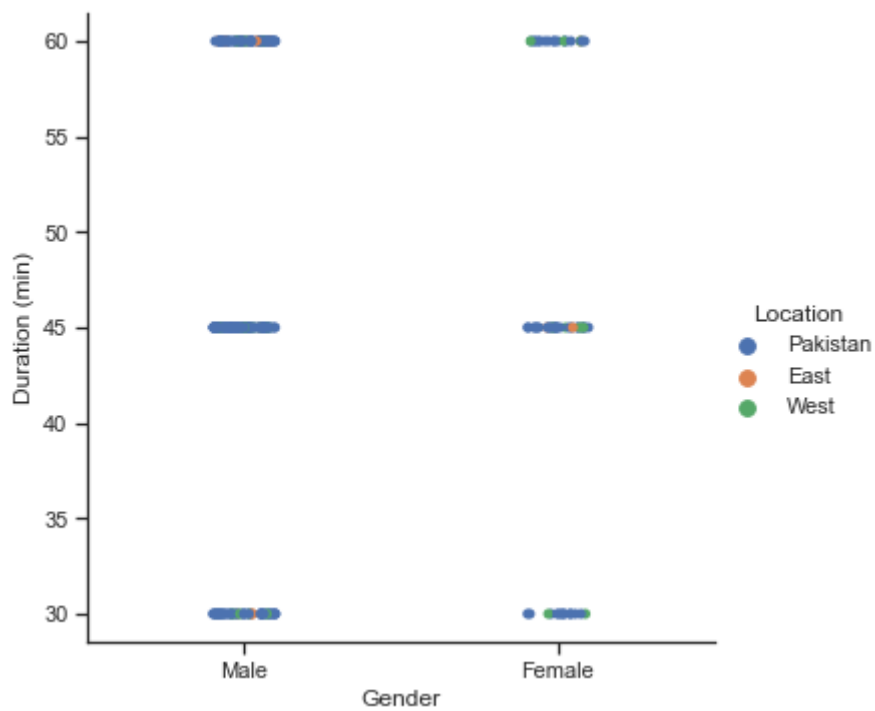


```
In [ ]: sns.set_theme(style="dark", color_codes=True)
sns.boxplot(x = 'Location', y = 'Duration (min)', hue = "Age", data = data_viz, color=
plt.show())
```

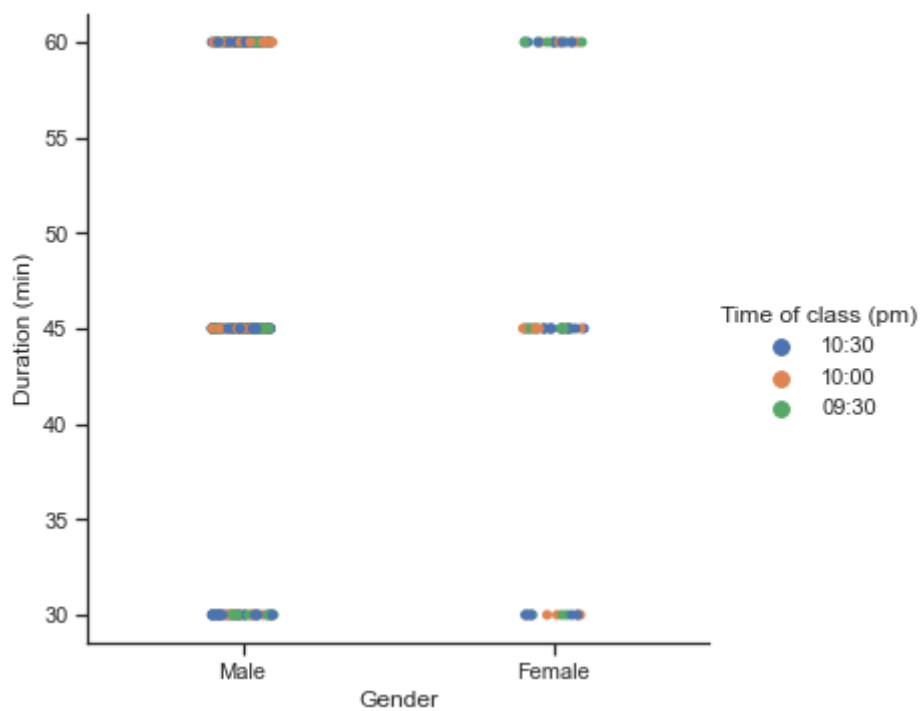


3. categorical plots

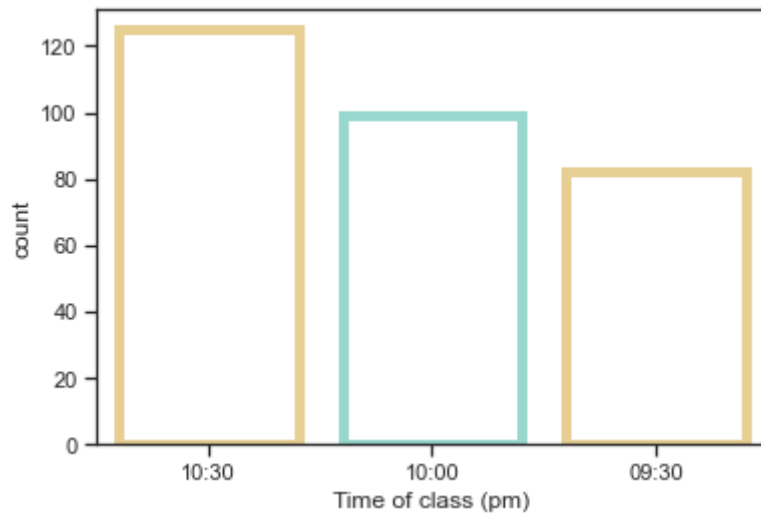
```
In [ ]: # Load data Set
data_viz = pd.read_csv("data_viz.csv")
sns.set_theme(style="ticks", color_codes=True)
sns.catplot(x="Gender", y="Duration (min)", hue="Location", data=csv_load)
plt.show()
```



```
In [ ]: sns.catplot( x="Gender", y="Duration (min)", hue="Time of class (pm)", data=csv_load,
plt.show())
```



```
In [ ]: p1= sns.countplot(x ='Time of class (pm)', data = csv_load, palette='Set2', facecolor=
linewidth=5,
edgecolor=sns.color_palette("BrBG", 2))
plt.show()
```



```
In [ ]: p1= sns.countplot(x ='Age', data = csv_load, palette='Set2', facecolor=(0, 0, 0, 0),
                        linewidth=5,
                        edgecolor=sns.color_palette("BrBG", 2))
p1.set_title("Graphs of colleague sugestion")
plt.show()
```

