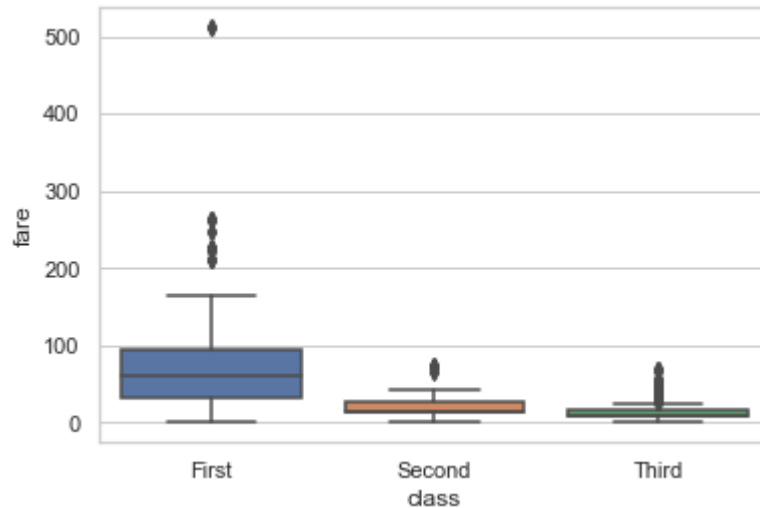


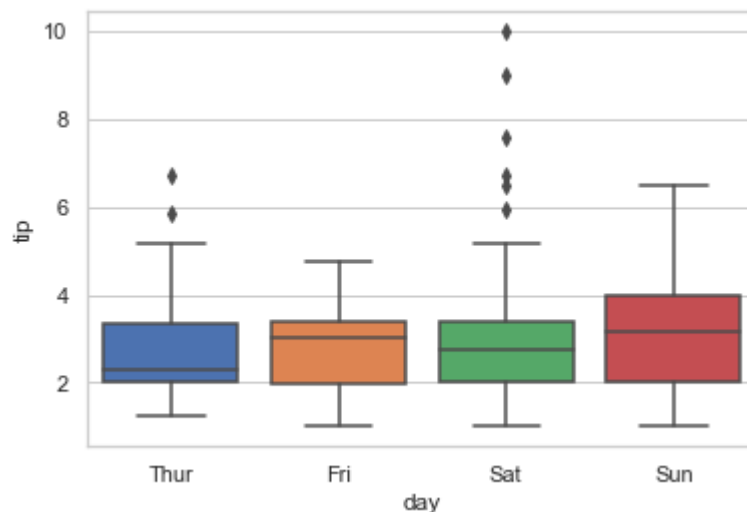
```
In [1]: import seaborn
#CANVAS
seaborn.set(style='whitegrid')
kashti= seaborn.load_dataset("titanic")
seaborn.boxplot(x="class",
                y="fare",
                data=kashti)
```

Out[1]: <AxesSubplot:xlabel='class', ylabel='fare'>



```
In [2]: import seaborn
#CANVAS
seaborn.set(style='whitegrid')
tip= seaborn.load_dataset("tips")
tip
seaborn.boxplot(x="day",y="tip", data=tip, saturation=10)
```

Out[2]: <AxesSubplot:xlabel='day', ylabel='tip'>



Adding Estimators #They work in barr plot not in boxplot. So, we can take estimators

```
In [3]: import seaborn
import numpy
#CANVAS
seaborn.set(style='whitegrid')
tip= seaborn.load_dataset("tips")
tip
seaborn.boxplot(x="day",y="tip", data=tip,estimator= mean saturation=10)
```

File "C:\Users\FAIZAF~1\AppData\Local\Temp\ipykernel_6892\4066216062.py", line 7

```
seaborn.boxplot(x="day",y="tip", data=tip,estimator= mean saturation=10)
^
```

SyntaxError: invalid syntax

```
In [4]: #TO GET THE WHOLE DATA #DESCRIBE
import seaborn as sns
import pandas as pf
import numpy as np
#CANVAS
tip= seaborn.load_dataset("tips")
tip
```

```
Out[4]:
```

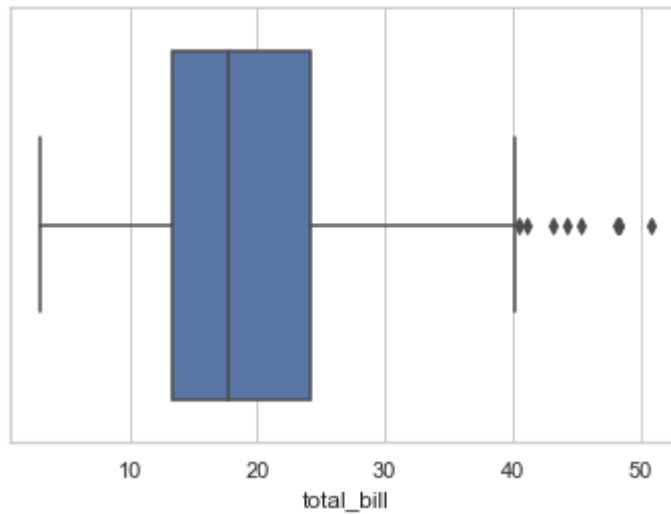
	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4
...
239	29.03	5.92	Male	No	Sat	Dinner	3
240	27.18	2.00	Female	Yes	Sat	Dinner	2
241	22.67	2.00	Male	Yes	Sat	Dinner	2
242	17.82	1.75	Male	No	Sat	Dinner	2
243	18.78	3.00	Female	No	Thur	Dinner	2

244 rows × 7 columns

```
In [ ]: tip.describe()
```

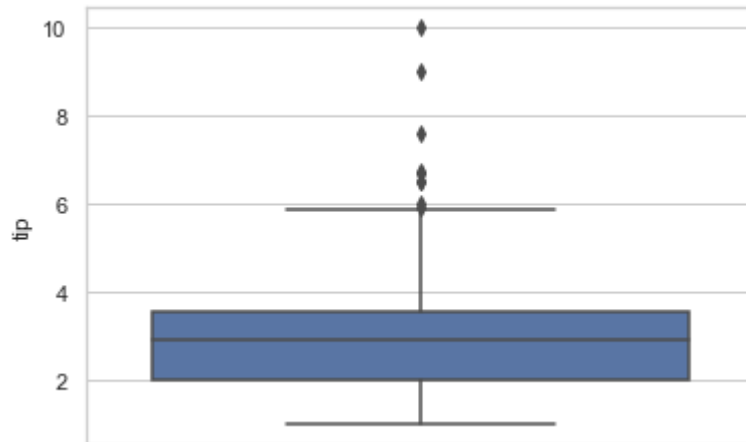
```
In [5]: #IMPORTING THE REQUIRED MODULE #ONLY ONE SIDE VALUE #TRY X
import seaborn as sns
#Setting background
seaborn.set(style="whitegrid")
#LOADING DATASET
tip=sns.load_dataset("tips")
seaborn.boxplot(x=tip['total_bill'])
```

Out[5]: <AxesSubplot:xlabel='total_bill'>



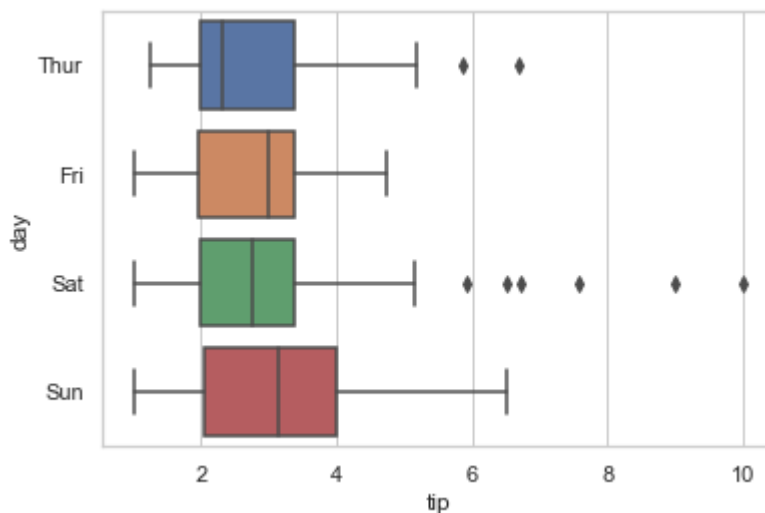
```
In [6]: import seaborn as sns
#Setting background
seaborn.set(style="whitegrid")
#LOADING DATASET
tip=sns.load_dataset("tips")
seaborn.boxplot(y=tip['tip'])
```

Out[6]: <AxesSubplot:ylabel='tip'>



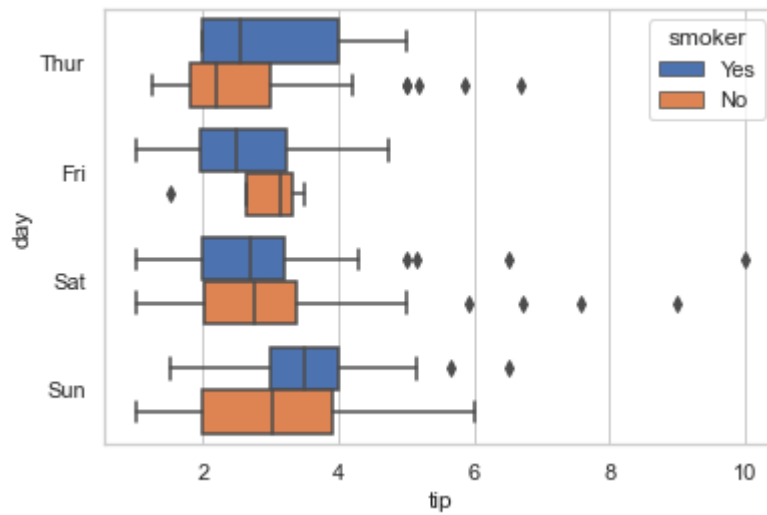
```
In [7]: import seaborn as sns
#Setting background
seaborn.set(style="whitegrid")
#LOADING DATASET
tip=sns.load_dataset("tips")
sns.boxplot(x="tip", y="day", data=tip) #SHOWS THAT TIP ON SUNDAY IS GREATEST
```

Out[7]: <AxesSubplot:xlabel='tip', ylabel='day'>



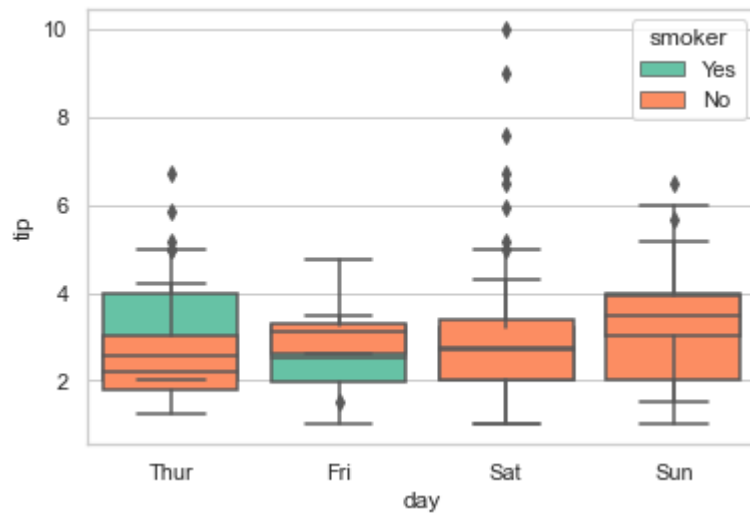
```
In [8]: import seaborn as sns
#Setting background
seaborn.set(style="whitegrid")
#LOADING DATASET
tip=sns.load_dataset("tips")
sns.boxplot(x="tip", y="day", hue="smoker", data=tip, saturation=15) #WE GOT RESULTS
```

Out[8]: <AxesSubplot:xlabel='tip', ylabel='day'>



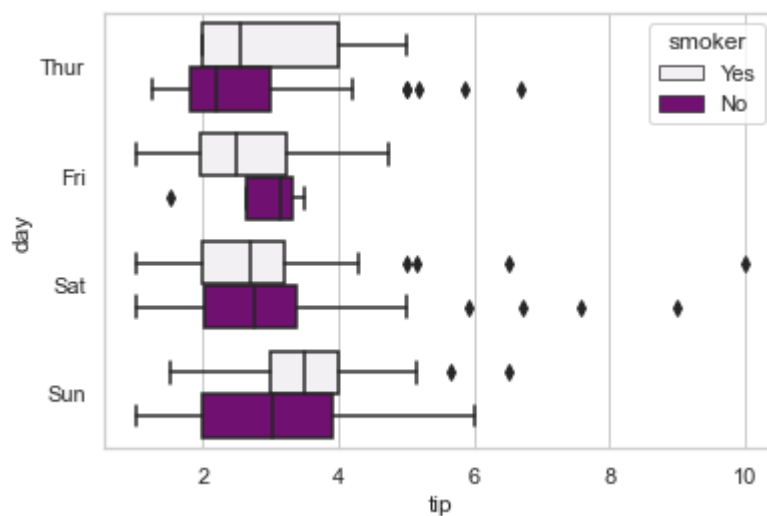
```
In [9]: import seaborn as sns
#Setting background
seaborn.set(style="whitegrid")
#LOADING DATASET
tip=sns.load_dataset("tips")
sns.boxplot(x="day", y="tip",hue="smoker", data=tip, saturation=15, palette="Set2")
```

Out[9]: <AxesSubplot:xlabel='day', ylabel='tip'>



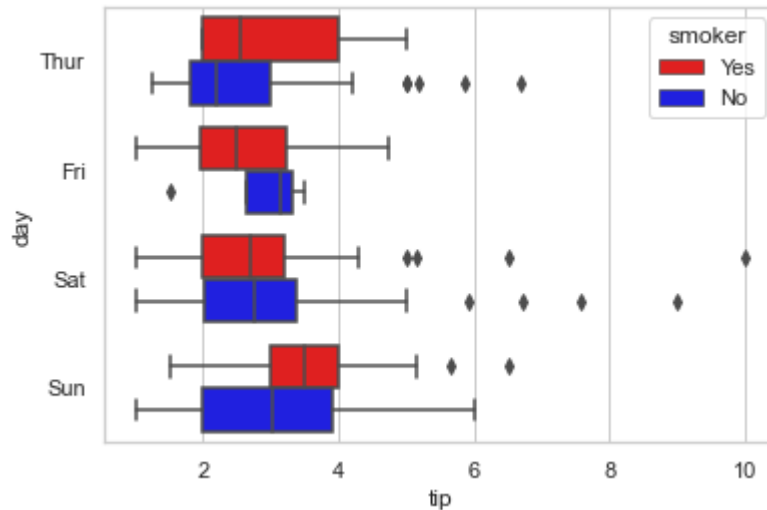
```
In [10]: import seaborn as sns
#Setting background
seaborn.set(style="whitegrid")
#LOADING DATASET
tip=sns.load_dataset("tips")
sns.boxplot(x="tip", y="day",hue="smoker", data=tip, color="purple",orient="h") #
```

Out[10]: <AxesSubplot:xlabel='tip', ylabel='day'>



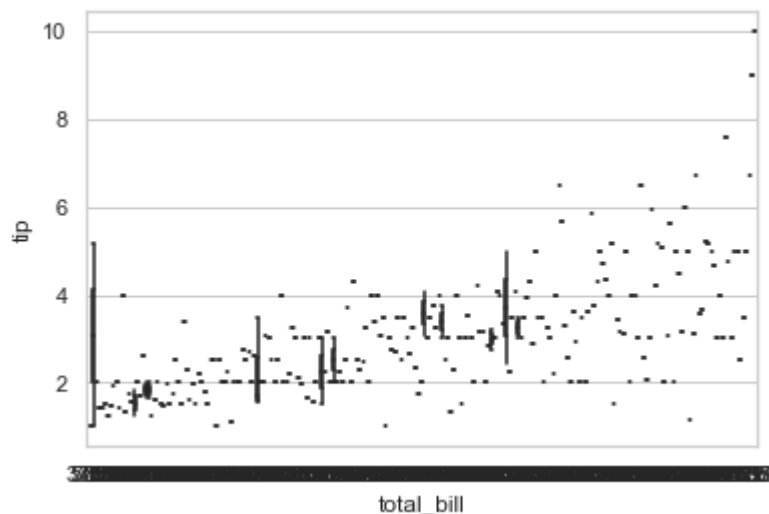
```
In [11]: #CHANGING COLOR OF INDIVIDUAL HUE
import seaborn as sns
#Setting background
seaborn.set(style="whitegrid")
#LOADING DATASET
tip=sns.load_dataset("tips")
sns.boxplot(x="tip", y="day", hue="smoker", data=tip, palette={"Yes": "red", "No": "blue"})
```

Out[11]: <AxesSubplot:xlabel='tip', ylabel='day'>



```
In [12]: import seaborn as sns #TO CHANGE IN VERTICA DIRECTION, WE NEED A NUMERICAL VALUE
#Setting background
seaborn.set(style="whitegrid")
#LOADING DATASET
tip=sns.load_dataset("tips")
sns.boxplot(x="total_bill", y="tip", data=tip, color="purple", orient="v")
```

Out[12]: <AxesSubplot:xlabel='total_bill', ylabel='tip'>



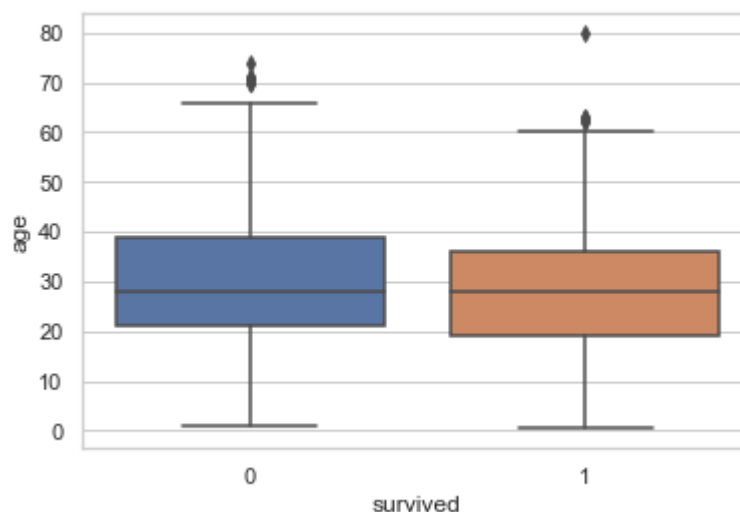
MODIFICATION OF GRAPHS

```
In [13]: import seaborn as sns
import pandas as pd
import numpy as np
kashti=sns.load_dataset("titanic")
kashti.head() #WHEN WE DO THIS WE GET FIRST 5 ROWS OF THE DATA AND CAN CHANGE AC
```

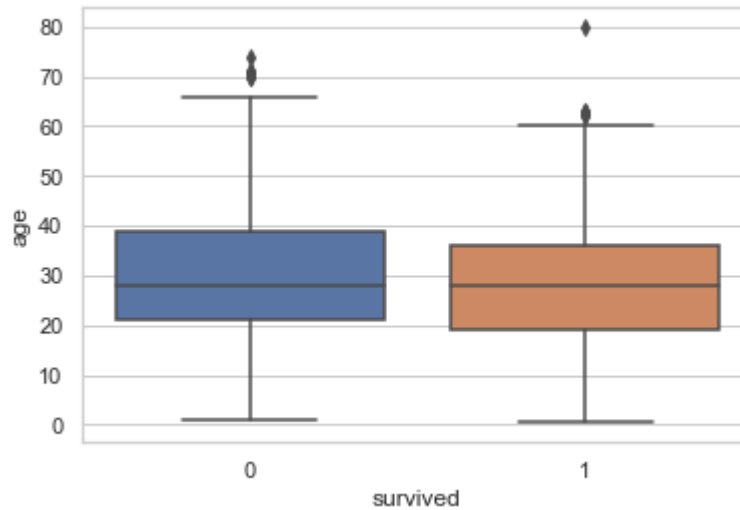
```
Out[13]:
```

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	de
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	N
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	N
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	N

```
In [18]: import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd
import numpy as np
kashti=sns.load_dataset("titanic")
sns.boxplot(x="survived",y="age",data=kashti)
plt.show()
```




```
In [17]: sns.boxplot(x="survived",y="age",data=kashti)  
plt.show()
```



- GET MEAN MARKED
- ADDING LABELS ON GRAPH
- ADDING TITLES OF GRAPH
- BOLDING THE LABELS

```
In [31]: import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd
import numpy as np
kashti=sns.load_dataset("titanic")
sns.boxplot(x="survived", y="age", data=kashti, showmeans=True,
            meanprops={"marker":"+","markersize":"22", "markeredgecolor":"purple"}
#ADDING LABELS AND THEIR WEIGHT
plt.xlabel("How many survived attack",weight='bold')
plt.ylabel("What was their age",weight='bold')
plt.title("SURVIVAL GRAPH")
plt.show()
```

