

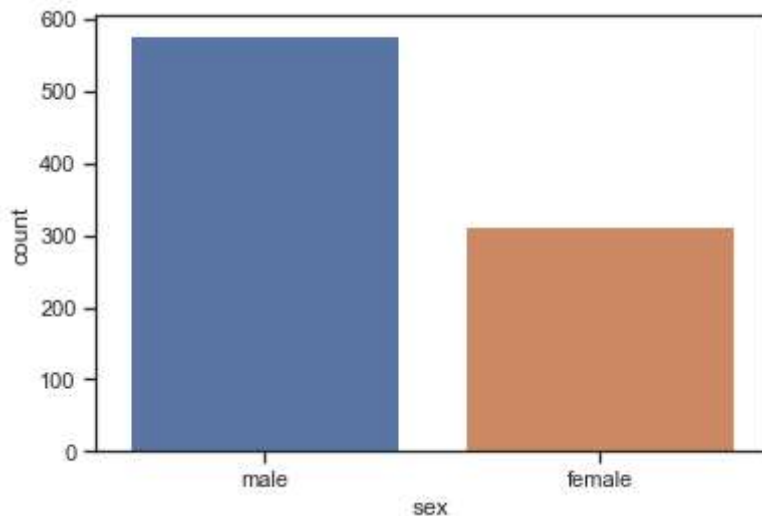
BMI and Data Visualization

```
In [10]: name= input ("what is your name :: ")
w= int(input("weight: "))
h= float(input("height: "))
BMI=float(w/(h**2))
print ("my name is " ,name, "by BMI is ",BMI)
```

what is your name :: asfand
weight: 6
height: 1.2
my name is asfand by BMI is 4.166666666666667

Count Plot For 1 variable

```
In [9]: # titanic plot
import seaborn as sea
import matplotlib.pyplot as plt
sea.set_theme(style="ticks",color_codes=True)
titanic = sea.load_dataset("titanic")
p = sea.countplot(x = "sex", data = titanic) # count function will count the intensity
plt.show()
```

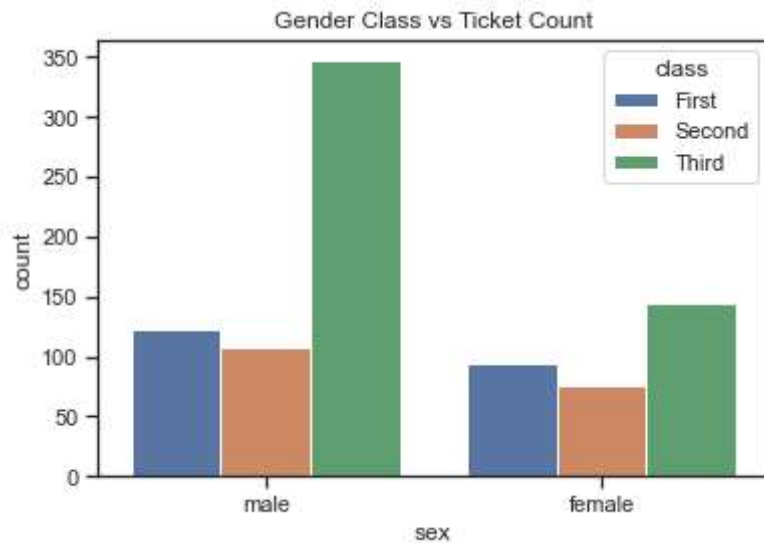


Count Plot For 2 variable

- This will show for male and female which class got how many tickets
- how to title the plot
 - you have to use variable of the plot statement for this

```
In [14]: # titanic plot
import seaborn as sea
import matplotlib.pyplot as plt
sea.set_theme(style="ticks",color_codes=True)
titanic = sea.load_dataset("titanic")
p = sea.countplot(x = "sex", data = titanic,hue = "class")
```

```
# Adding titles
p.set_title("Gender Class vs Ticket Count")
plt.show()
```



Data csv analysis

- make a CSV of the file you want to load
- then upload it to the directory where ever
- now make .py or jupyter note book in that directory where you are placing the file
- import pandas as p
- use pandas to read the files

```
In [17]: import pandas as p
import seaborn as sns
import matplotlib.pyplot as plt
#Step 1:: chilla file to load
d=p.read_csv("chilla_data_viz_1.csv.csv")
print (d)

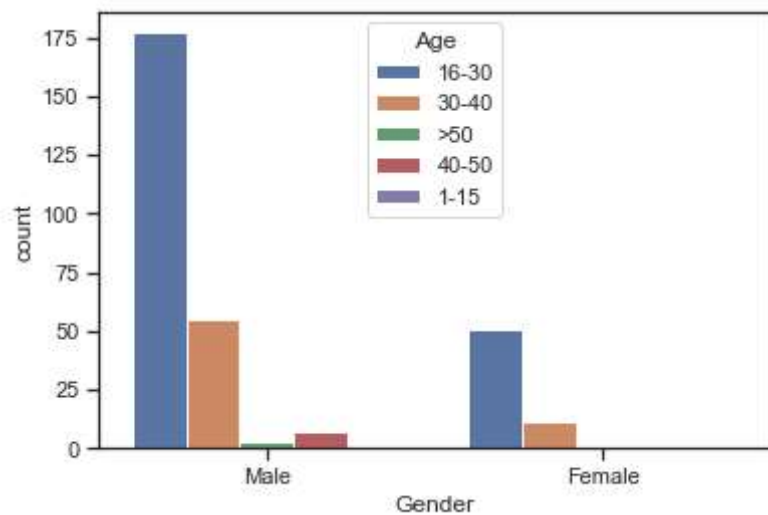
#Step 2:: set the theme
sns.set_theme(style="ticks",color_codes=True)

#Step 3:: not plot the count plot
pp=sns.countplot (x="Gender",hue = "Age",data = d)
plt.show()
```

	Timestamp	Gender	Age	Location	Time of class (pm)	\
0	1/3/2022 19:09:29	Male	16-30	Pakistan	10:30	
1	1/3/2022 19:09:33	Male	16-30	Pakistan	10:00	
2	1/3/2022 19:09:33	Male	16-30	Pakistan	10:00	
3	1/3/2022 19:09:33	Male	30-40	Pakistan	9:30	
4	1/3/2022 19:09:34	Male	16-30	East	9:30	
..	
301	1/3/2022 19:11:51	Male	16-30	Pakistan	9:30	
302	1/3/2022 19:11:52	Male	16-30	Pakistan	10:30	
303	1/3/2022 19:11:53	Male	16-30	Pakistan	10:00	
304	1/3/2022 19:11:54	Female	16-30	Pakistan	10:30	
305	1/3/2022 19:11:55	Male	16-30	Pakistan	10:30	

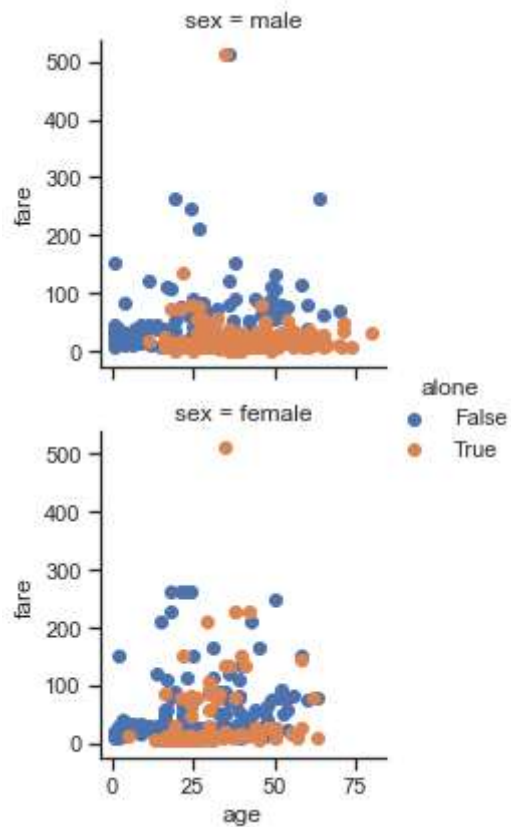
	Duration (min)
0	60
1	60
2	30
3	30
4	60
..	...
301	30
302	45
303	60
304	60
305	45

[306 rows x 6 columns]

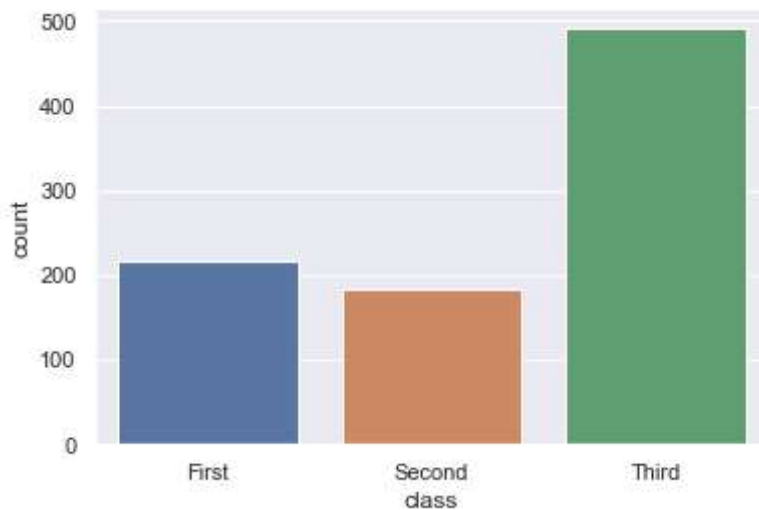


In [14]:

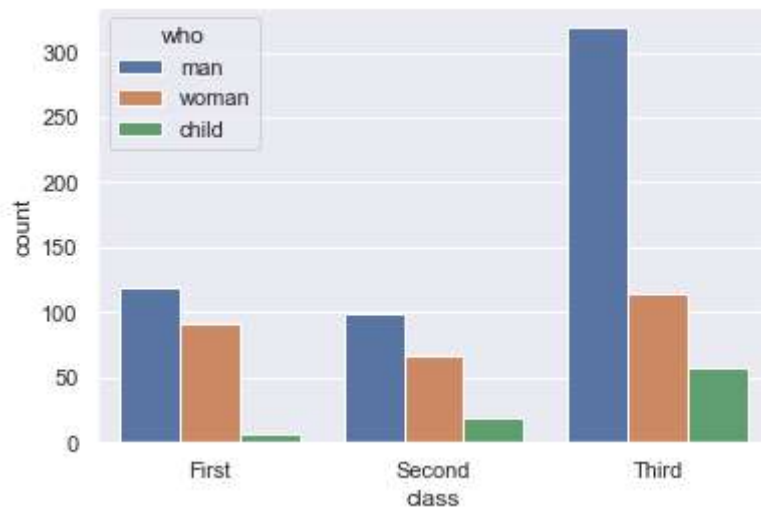
```
import seaborn as sea
import matplotlib.pyplot as plt
sea.set_theme(style="ticks", color_codes=True)
titanic = sea.load_dataset("titanic")
g=sea.FacetGrid(titanic, row="sex", hue="alone")
g=(g.map(plt.scatter, "age", "fare").add_legend())
plt.show()
```



```
In [1]: import seaborn as sns
sns.set_theme(style="darkgrid")
titanic = sns.load_dataset("titanic")
ax = sns.countplot(x="class", data=titanic)
```



```
In [3]: ax = sns.countplot(x="class", hue="who", data=titanic)
```



```
In [4]: ax = sns.countplot(x="who", data=titanic, palette="Set3")
```

