

## Day02 - Simple Calculator for BMI & Data Visualization

### 01\_Get Height and weight from the user as a input

```
In [1]: Height=input("whats is your height in meter? ")
Weight=input("whats is your weight in kg? ")
Height=float(Height)
Weight=float(Weight)
BMI=Weight/Height**2
print("My name is Arsalan.", "my BMI is",BMI)
```

```
whats is your height in meter? 1.76
whats is your weight in kg? 74
My name is Arsalan. my BMI is 23.889462809917354
```

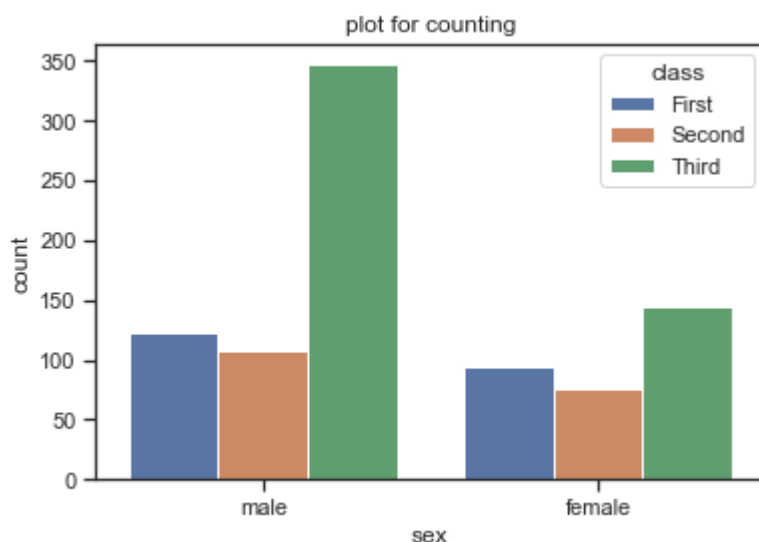
### 02\_ Data Visualzation Basic Example

Use Seaborn and matplotlib to plot titanic data (built-in data in seaborn library)

```
In [2]: import seaborn as sns
import matplotlib.pyplot as plt
sns.set_theme(style="ticks", color_codes="true")

titanic=sns.load_dataset("titanic")
# p1=sns.catplot(x="sex",y="survived", hue="class", kind="bar" , data=titanic)
p1=sns.countplot(x='sex',data=titanic, hue='class' )
p1.set_title("plot for counting")
```

```
Out[2]: Text(0.5, 1.0, 'plot for counting')
```



### 03\_ Scatter Plot example

```
In [3]: #Scatter Plot example
```

```
import seaborn as sns
import matplotlib.pyplot as plt
sns.set_theme(style="darkgrid", color_codes="true")

titanic=sns.load_dataset("titanic")
h=sns.FacetGrid(titanic,row="sex",hue="alone")
h=(h.map(plt.scatter, "age", "fare").add_legend())
plt.show()
```

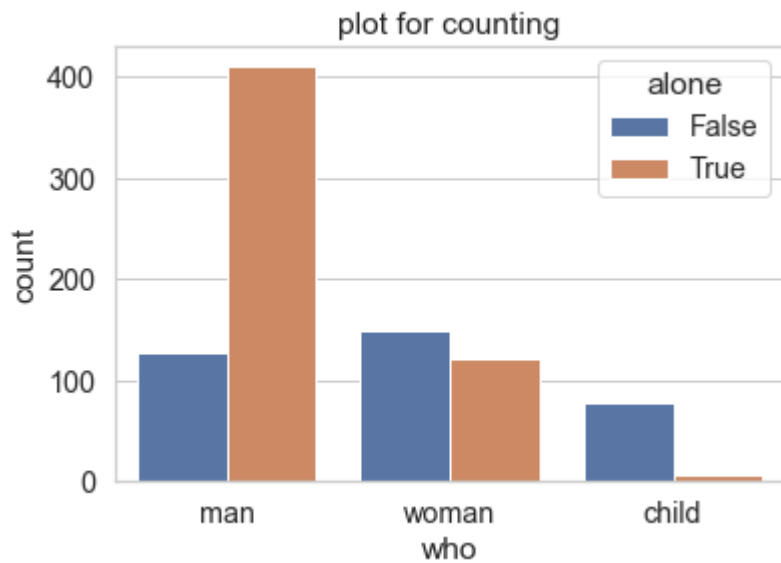


## 04\_Final plot based on the Titanic Data

In [4]:

```
#Use Seaborn and matplotlib to plot titanic data (built-in data in seaborn library)
import seaborn as sns
import matplotlib.pyplot as plt
sns.set_theme(style="whitegrid", color_codes="true")
#sns.set_context("talk")
sns.set_context("notebook", font_scale=1.3, rc={"lines.linewidth":2.5})

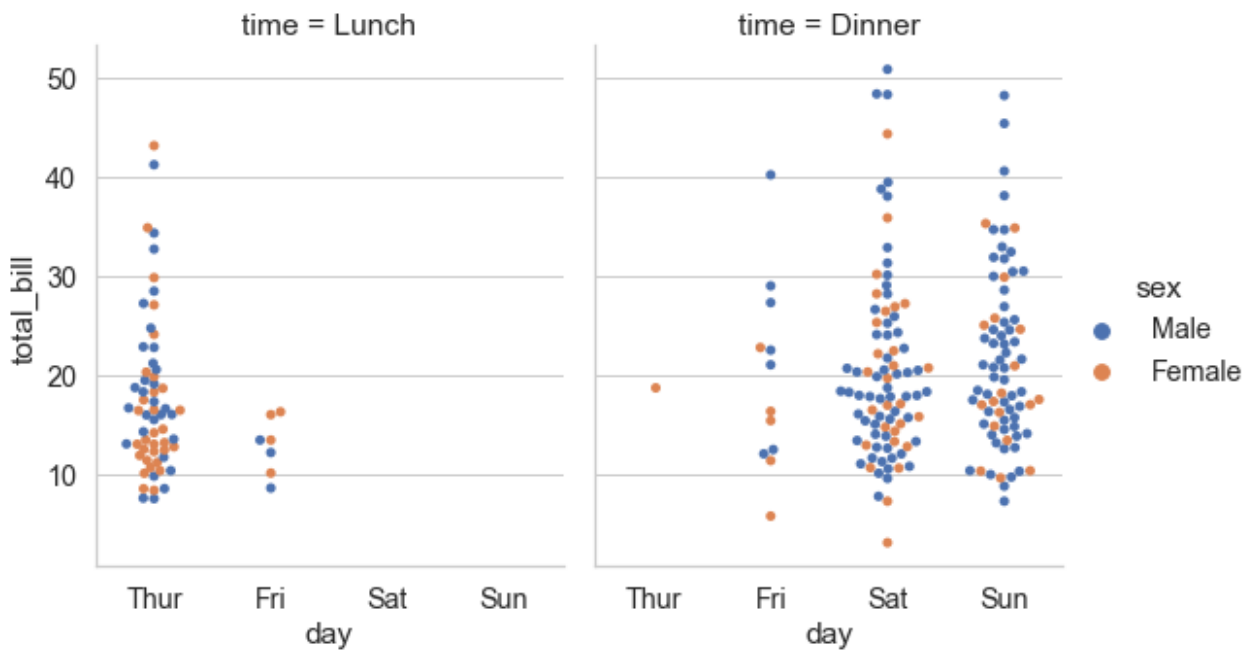
titanic=sns.load_dataset("titanic")
# print (titanic)
p1=sns.countplot(x='who',data=titanic, hue='alone' )
p1.set_title("plot for counting")
plt.show()
```



## 05\_Example from seaborn bulitin dataset (tips)

```
In [5]: import seaborn as sns
import matplotlib.pyplot as plt
tips = sns.load_dataset("tips")
#print(tips)
sns.catplot(x="day", y="total_bill", hue="sex",
            col="time", aspect=.8,
            kind="swarm", data=tips)
```

Out[5]: <seaborn.axisgrid.FacetGrid at 0x16d6c40a790>



In [ ]: