```python
In [1]:  # Body Mass Index (BMI)
         # input weight
         # Height
         # BMI (Ask your self your hight)
         # Weight
         # Calculate BMI
         # Print BMI (My name is ...and my BMI is ...)
```

```python
In [2]:  weight= input("What is your weight")
         weight=int(weight)
         height= input ("What is your Height")
         height=float(height)
         BMI=(weight/(height)**2)
         BMI
```

```
Out[2]:  19.56213302545735
```

```python
In [3]:  def Bmi_Calculator():
             weight=input("What is your weight: ")
             weight=int(weight)
             height=input("what is your Heigh: ")
             height=float(height)
             BMI=(weight/(height)**2)
             print("My Name is Mujahid and my BMI is: ",BMI)
```

```python
In [4]:  Bmi_Calculator()
```

```
My Name is Mujahid and my BMI is:  19.56213302545735
```

1-Bar plots

- Catogorical variables

```python
In [6]:  import seaborn as sns
         import matplotlib.pyplot as plt
```
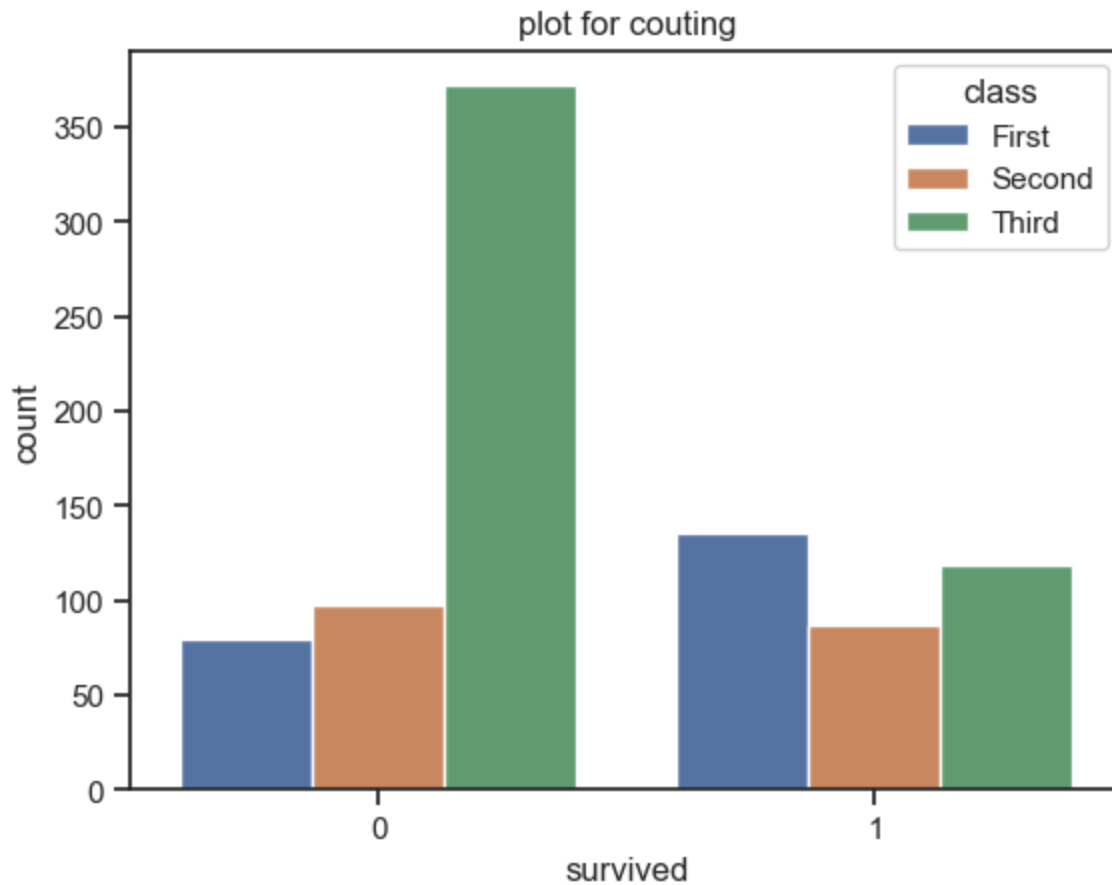
```python
In [7]:  import seaborn as sns
         import matplotlib.pyplot as plt
         sns.set_theme(style="ticks", color_codes=True)
         titanic= sns.load_dataset("titanic")
         sns.catplot(x="sex",y="survived",hue="class", kind="bar",data=titanic)
         plt.show()
```
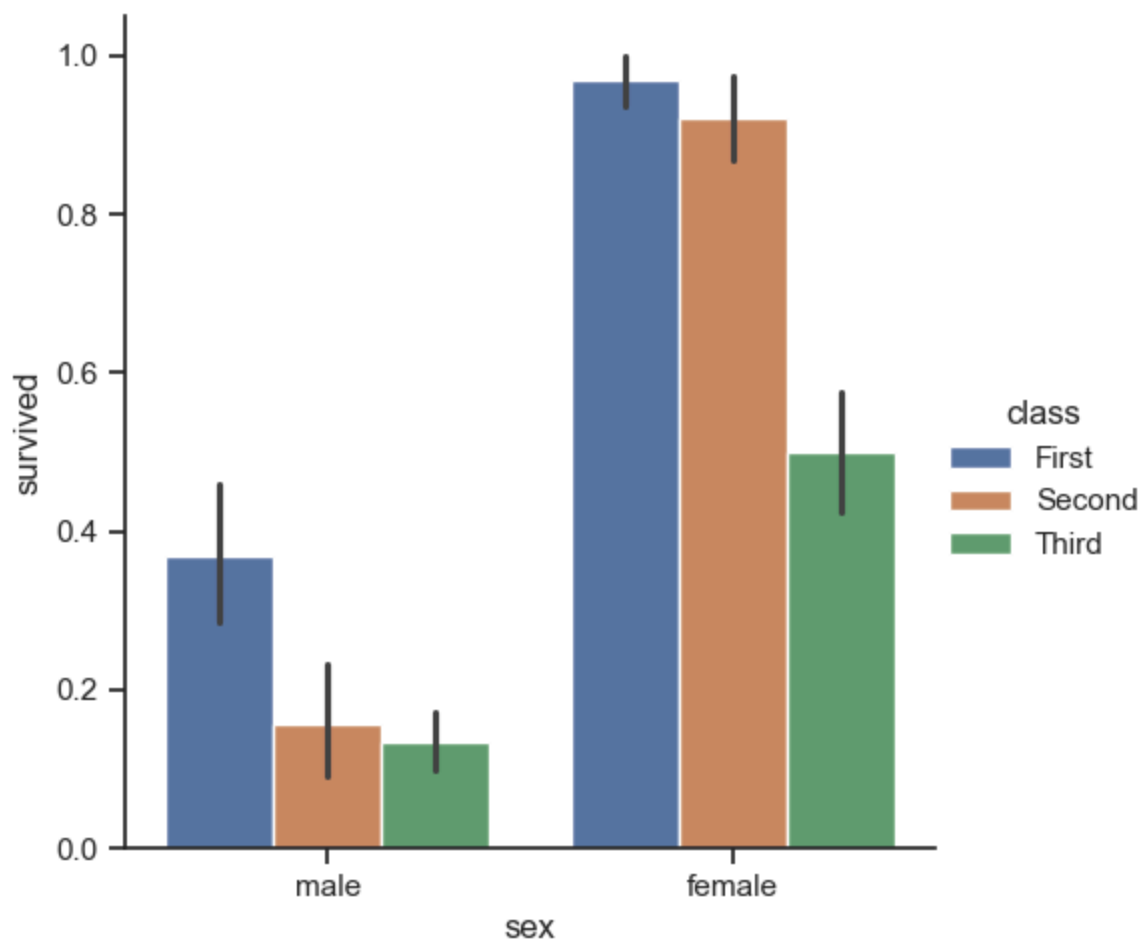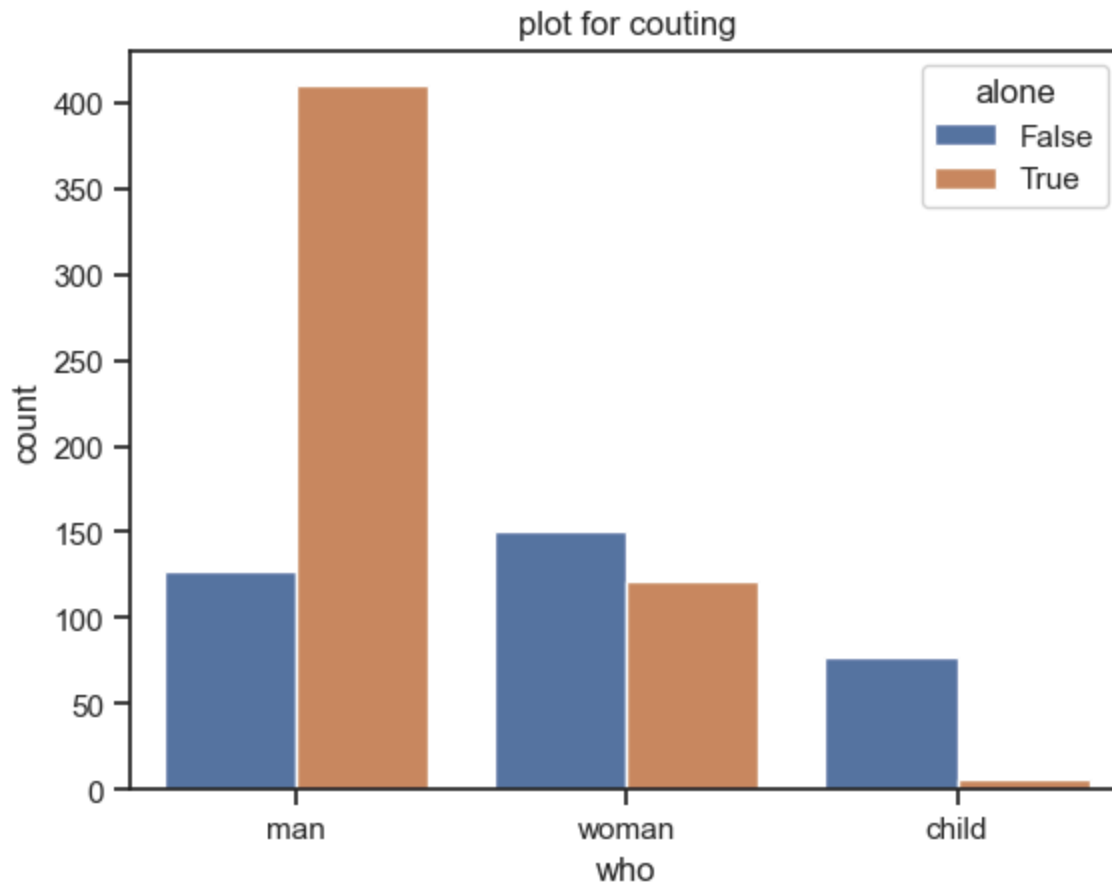
2-Count plot

```
In [9]:  #import seaborn as sns
         #import matplotlib.pyplot as plt
         sns.set_theme(style="ticks", color_codes=True)
         titanic= sns.load_dataset("titanic")
         p1=sns.countplot(x='survived',data=titanic,hue='class')
         p1.set_title("plot for couting")
         plt.show
```

Out[9]: `<function matplotlib.pyplot.show(close=None, block=None)>`

plot for couting
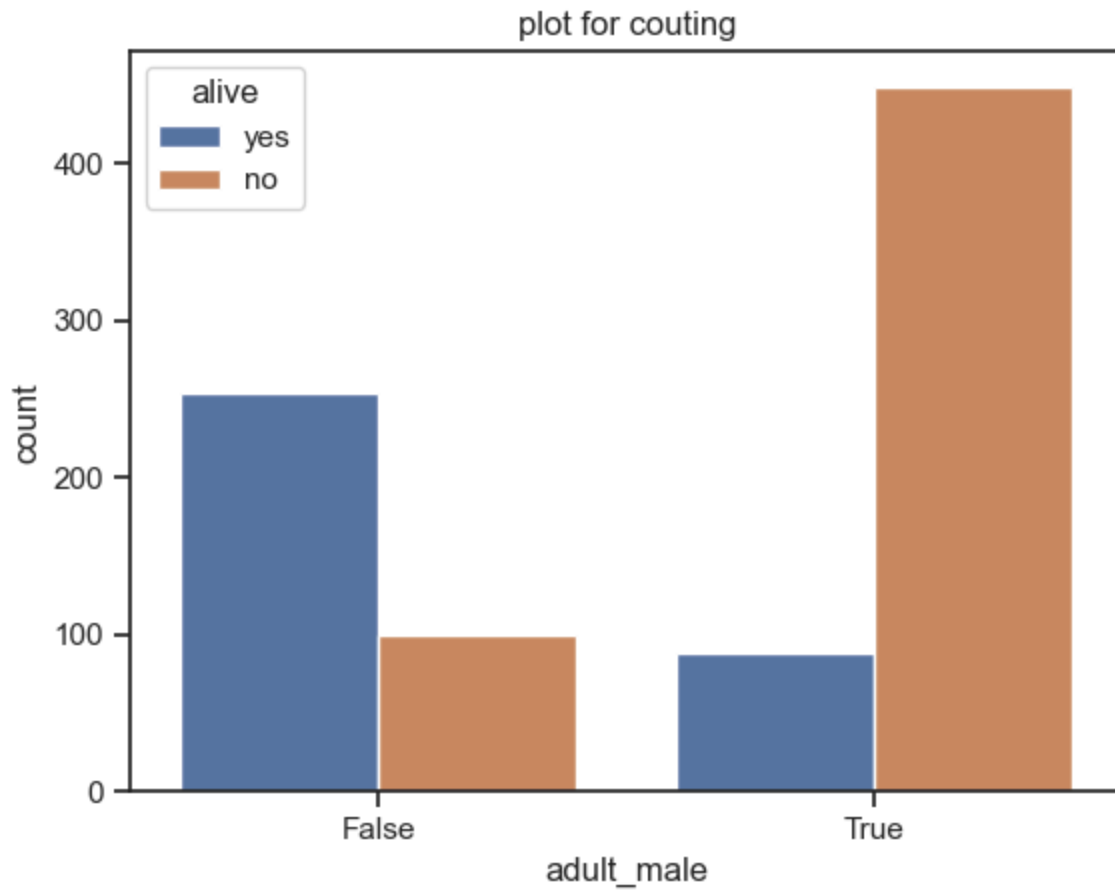
```
In [10]:  sns.set_theme(style="ticks", color_codes=True)
          titanic= sns.load_dataset("titanic")
          p1=sns.countplot(x='who',data=titanic,hue='alone')
          p1.set_title("plot for couting")
          plt.show
```

Out[10]: <function matplotlib.pyplot.show(close=None, block=None)>

In [11]:
```python
sns.set_theme(style="ticks", color_codes=True)
titanic= sns.load_dataset("titanic")
p1=sns.countplot(x='adult_male',data=titanic,hue='alive')
p1.set_title("plot for couting")
plt.show
```

Out[11]: `<function matplotlib.pyplot.show(close=None, block=None)>`

```
In [12]:   print(titanic)
```

```
     survived  pclass     sex   age  sibsp  parch      fare embarked    class  \
0           0       3    male  22.0      1      0    7.2500        S    Third
1           1       1  female  38.0      1      0   71.2833        C    First
2           1       3  female  26.0      0      0    7.9250        S    Third
3           1       1  female  35.0      1      0   53.1000        S    First
4           0       3    male  35.0      0      0    8.0500        S    Third
..        ...     ...     ...   ...    ...    ...       ...      ...      ...
886         0       2    male  27.0      0      0   13.0000        S   Second
887         1       1  female  19.0      0      0   30.0000        S    First
888         0       3  female   NaN      1      2   23.4500        S    Third
889         1       1    male  26.0      0      0   30.0000        C    First
890         0       3    male  32.0      0      0    7.7500        Q    Third

       who  adult_male deck  embark_town alive  alone
0      man        True  NaN  Southampton    no  False
1    woman       False    C    Cherbourg   yes  False
2    woman       False  NaN  Southampton   yes   True
3    woman       False    C  Southampton   yes  False
4      man        True  NaN  Southampton    no   True
..     ...         ...  ...          ...   ...    ...
886    man        True  NaN  Southampton    no   True
887  woman       False    B  Southampton   yes   True
888  woman       False  NaN  Southampton    no  False
889    man        True    C    Cherbourg   yes   True
890    man        True  NaN   Queenstown    no   True

[891 rows x 15 columns]
```
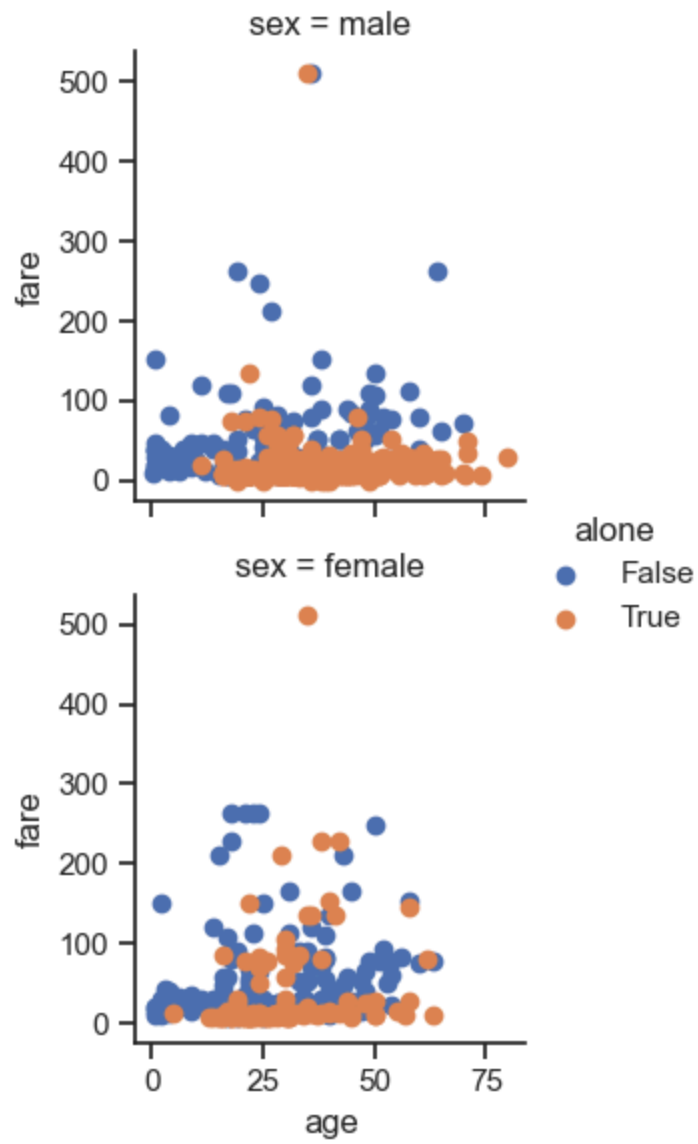
3-Scatterplot

In [14]:
```python
sns.set_theme(style="ticks", color_codes=True)
titanic= sns.load_dataset("titanic")
g =sns.FacetGrid(titanic,row="sex", hue="alone",)
g=(g.map(plt.scatter,"age","fare").add_legend())
plt.show()
```

- Seach Data sets and adapt data sets