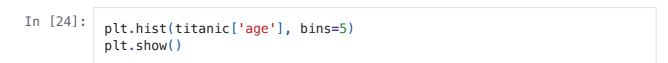
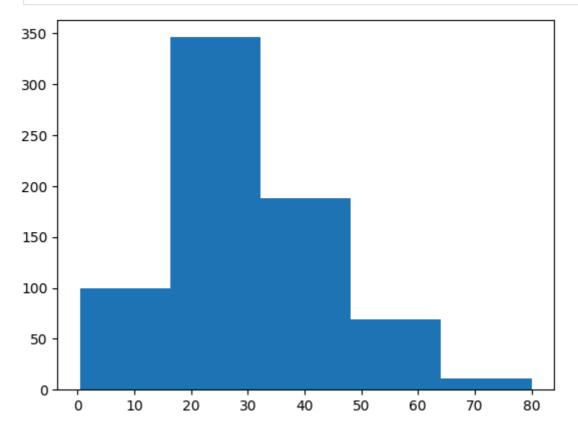
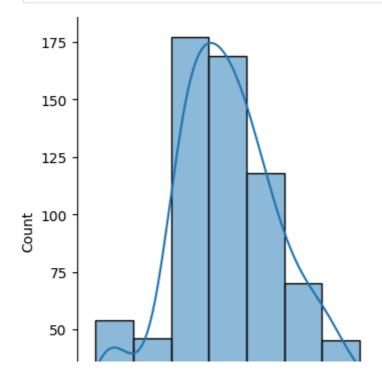
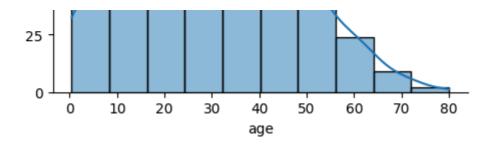
```
In [20]:
          import numpy as np
          import pandas as pd
          import matplotlib.pyplot as plt
          import seaborn as sns
In [21]:
          titanic = sns.load_dataset("titanic")
          tips = sns.load_dataset("tips")
In [22]:
          sns.countplot(x="survived", data=titanic, hue="survived")
Out[22]: <Axes: xlabel='survived', ylabel='count'>
                                                                       survived
                                                                            0
           500
                                                                             1
           400
        300
           200
           100
             0
                               0
                                                               1
                                            survived
In [23]:
          titanic['sex'].value_counts().plot(kind="pie", autopct="%.2f")
          plt.show()
                     male
                           64.76
```





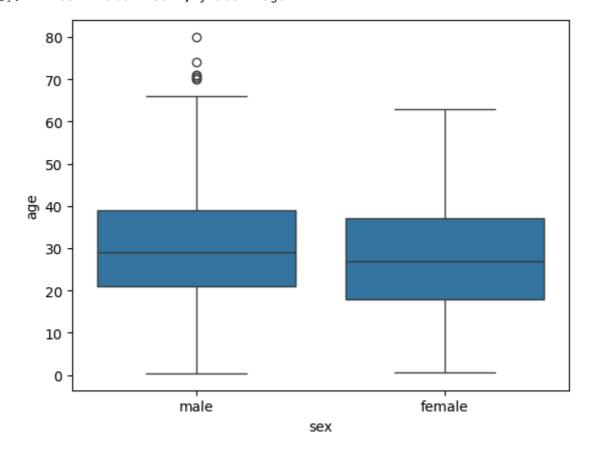
In [25]:
 sns.displot(x=titanic["age"].dropna(), bins=10, kde=True)
 plt.show()





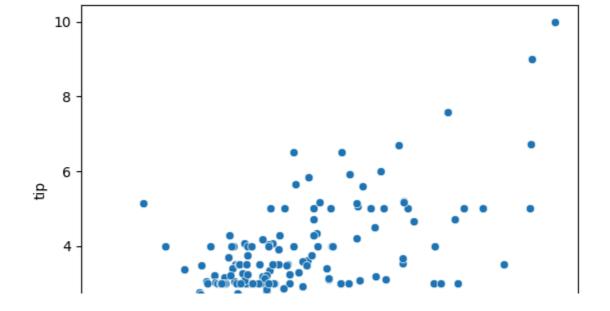
In [26]: sns.boxplot(x="sex", y="age", data=titanic)

Out[26]: <Axes: xlabel='sex', ylabel='age'>

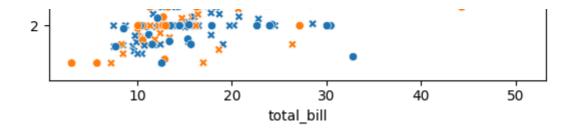


In [27]: sns.scatterplot(x=tips["total\_bill"], y=tips["tip"])

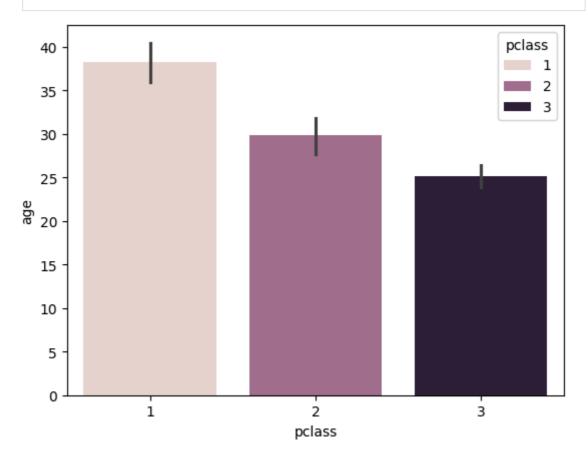
Out[27]: <Axes: xlabel='total\_bill', ylabel='tip'>



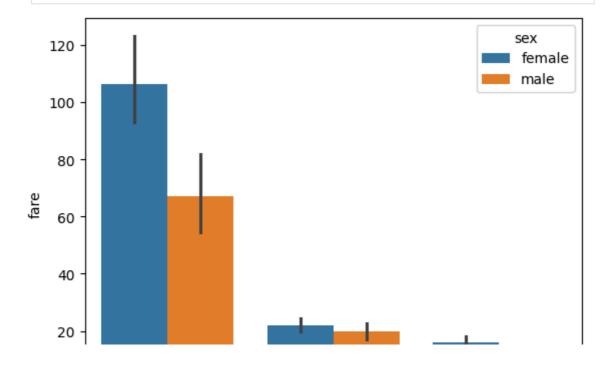
```
2
                           10
                                        20
                                                                   40
                                                     30
                                                                                50
                                              total_bill
In [28]:
           sns.scatterplot(x=tips["total_bill"], y=tips["tip"], hue=tips["sex"])
           plt.show()
            10
                      sex
                       Male
                       Female
             8
             6
         ф
             4
             2
                           10
                                        20
                                                     30
                                                                   40
                                                                                50
                                              total_bill
In [29]:
           sns.scatterplot(x=tips["total_bill"], y=tips["tip"], hue=tips["sex"],
           style=tips['smoker'])
plt.show()
            10
                       sex
                       Male
                       Female
                       smoker
             8
                       Yes
                       No
             6
         tip
             4
```



In [30]: sns.barplot(x="pclass", y="age", hue="pclass", data=titanic)
plt.show()



In [31]: sns.barplot(x="pclass", y="fare", hue="sex", data=titanic)
plt.show()

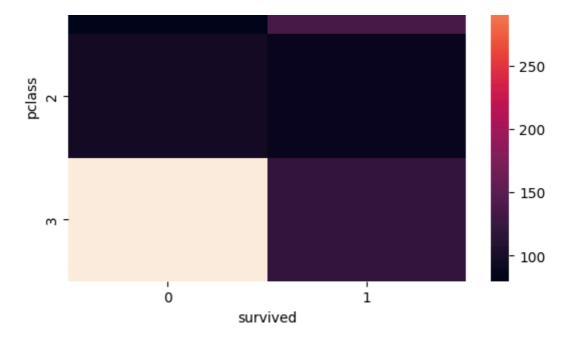


```
3
                                              pclass
          sns.boxplot(x="sex" , y="age" ,data=titanic , hue="sex")
Out[32]: <Axes: xlabel='sex', ylabel='age'>
           80
                               0
           70
           60
           50
         9g 40
           30
           20
           10
            0
                                                             female
                             male
                                              sex
          sns.boxplot(x="sex", y="age", hue="survived", data=titanic)
Out[33]: <Axes: xlabel='sex', ylabel='age'>
                                     0
           80
                                                                       survived
           70
                                                                          _ 1
           60
           50
         е
Ве 40
           30
           20
           10
```

In [32]:

In [33]:

```
male
                                                            female
                                             sex
In [34]:
          sns.kdeplot(titanic['survived'] == 0]['age'], color="blue", lake
          sns.kdeplot(titanic['survived'] == 1]['age'], color="orange",
Out[34]: <Axes: xlabel='age', ylabel='Density'>
           0.030
           0.025
           0.020
        Density
0.015
           0.010
           0.005
           0.000
                                     20
                                                40
                                                          60
                                                                     80
                                                age
In [35]:
          pd.crosstab(titanic['pclass'], titanic['survived'])
Out[35]: survived
                         1
           pclass
                1
                   80 136
                2
                   97
                        87
                3 372 119
In [36]:
          sns.heatmap(pd.crosstab(titanic['pclass'], titanic['survived']))
Out[36]: <Axes: xlabel='survived', ylabel='pclass'>
                                                                       - 350
                                                                         300
```





Out[37]: <seaborn.matrix.ClusterGrid at 0x12ed40050>

