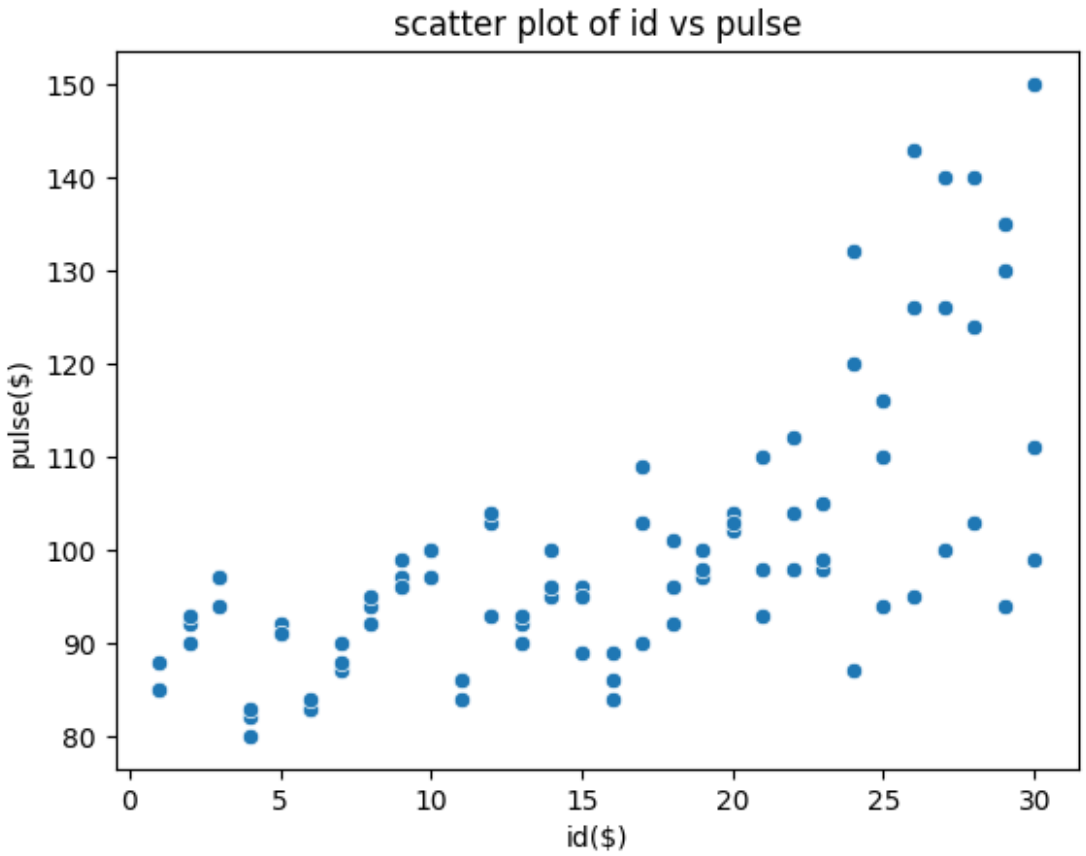
```
pip install seaborn
```

```
Requirement already satisfied: seaborn in
/usr/local/lib/python3.10/dist-packages (0.13.1)
Requirement already satisfied: numpy!=1.24.0,>=1.20 in
/usr/local/lib/python3.10/dist-packages (from seaborn) (1.25.2)
Requirement already satisfied: pandas>=1.2 in
/usr/local/lib/python3.10/dist-packages (from seaborn) (1.5.3)
Requirement already satisfied: matplotlib!=3.6.1,>=3.4 in
/usr/local/lib/python3.10/dist-packages (from seaborn) (3.7.1)
Requirement already satisfied: contourpy>=1.0.1 in
/usr/local/lib/python3.10/dist-packages (from matplotlib!=3.6.1,>=3.4-
>seaborn) (1.2.0)
Requirement already satisfied: cycler>=0.10 in
/usr/local/lib/python3.10/dist-packages (from matplotlib!=3.6.1,>=3.4-
>seaborn) (0.12.1)
Requirement already satisfied: fonttools>=4.22.0 in
/usr/local/lib/python3.10/dist-packages (from matplotlib!=3.6.1,>=3.4-
>seaborn) (4.48.1)
Requirement already satisfied: kiwisolver>=1.0.1 in
/usr/local/lib/python3.10/dist-packages (from matplotlib!=3.6.1,>=3.4-
>seaborn) (1.4.5)
Requirement already satisfied: packaging>=20.0 in
/usr/local/lib/python3.10/dist-packages (from matplotlib!=3.6.1,>=3.4-
>seaborn) (23.2)
Requirement already satisfied: pillow>=6.2.0 in
/usr/local/lib/python3.10/dist-packages (from matplotlib!=3.6.1,>=3.4-
>seaborn) (9.4.0)
Requirement already satisfied: pyparsing>=2.3.1 in
/usr/local/lib/python3.10/dist-packages (from matplotlib!=3.6.1,>=3.4-
>seaborn) (3.1.1)
Requirement already satisfied: python-dateutil>=2.7 in
/usr/local/lib/python3.10/dist-packages (from matplotlib!=3.6.1,>=3.4-
>seaborn) (2.8.2)
Requirement already satisfied: pytz>=2020.1 in
/usr/local/lib/python3.10/dist-packages (from pandas>=1.2->seaborn)
(2023.4)
Requirement already satisfied: six>=1.5 in
/usr/local/lib/python3.10/dist-packages (from python-dateutil>=2.7-
>matplotlib!=3.6.1,>=3.4->seaborn) (1.16.0)
```

```
import seaborn as sns
import matplotlib.pyplot as plt
t=sns.load_dataset("exercise")
print(t)
sns.scatterplot(x="id",y="pulse",data=t)
plt.title("scatter plot of id vs pulse")
plt.xlabel("id($)")
plt.ylabel("pulse($)")
plt.show()
```

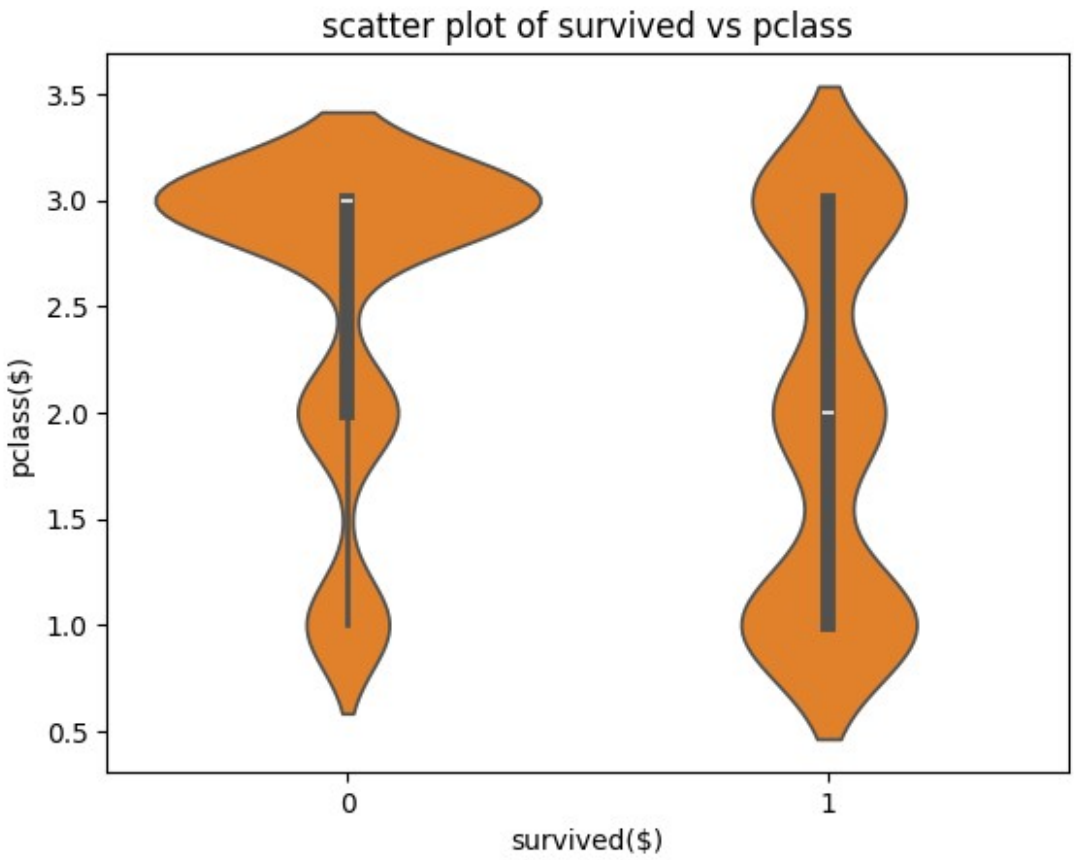
```
    Unnamed: 0  id     diet  pulse    time     kind
0            0   1  low fat     85   1 min     rest
1            1   1  low fat     85  15 min     rest
2            2   1  low fat     88  30 min     rest
3            3   2  low fat     90   1 min     rest
4            4   2  low fat     92  15 min     rest
..         ...  ..      ...    ...     ...      ...
85          85  29   no fat    135  15 min  running
86          86  29   no fat    130  30 min  running
87          87  30   no fat     99   1 min  running
88          88  30   no fat    111  15 min  running
89          89  30   no fat    150  30 min  running

[90 rows x 6 columns]
```




```python
import seaborn as sns
import matplotlib.pyplot as plt
titanic=sns.load_dataset("titanic")
print(titanic)
sns.scatterplot(x="survived",y="pclass",data=titanic)
sns.violinplot(x="survived",y="pclass",data=titanic)
plt.title("scatter plot of survived vs pclass")
```

```
plt.xlabel("survived($)")
plt.ylabel("pclass($)")
plt.show()
```

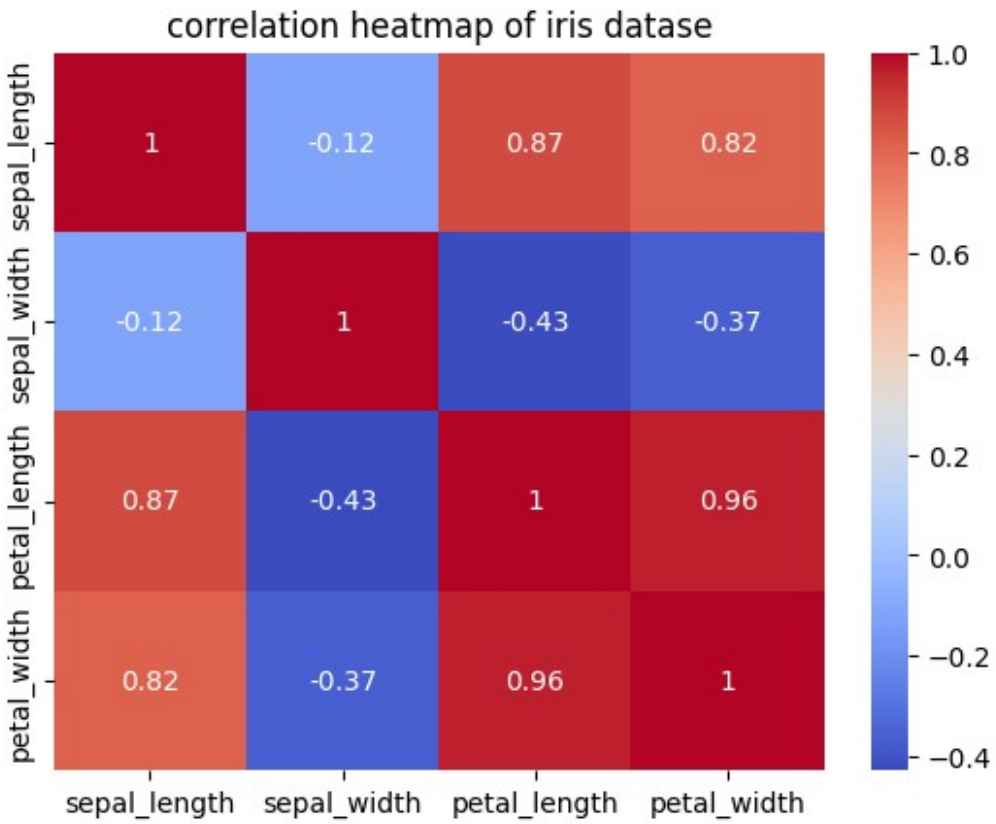
```
     survived  pclass     sex   age  sibsp  parch     fare embarked
class  \
0           0       3    male  22.0      1      0   7.2500        S
Third
1           1       1  female  38.0      1      0  71.2833        C
First
2           1       3  female  26.0      0      0   7.9250        S
Third
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]
```




```
import seaborn as sns
import matplotlib.pyplot as plt
iris=sns.load_dataset("iris")
print(iris.head())
correlation_matrix=iris.corr()
sns.heatmap(correlation_matrix,annot= True,cmap="coolwarm")
plt.title("correlation heatmap of iris datase")
plt.show()
```

```
   sepal_length  sepal_width  petal_length  petal_width species
0           5.1          3.5           1.4          0.2  setosa
1           4.9          3.0           1.4          0.2  setosa
2           4.7          3.2           1.3          0.2  setosa
3           4.6          3.1           1.5          0.2  setosa
4           5.0          3.6           1.4          0.2  setosa
```

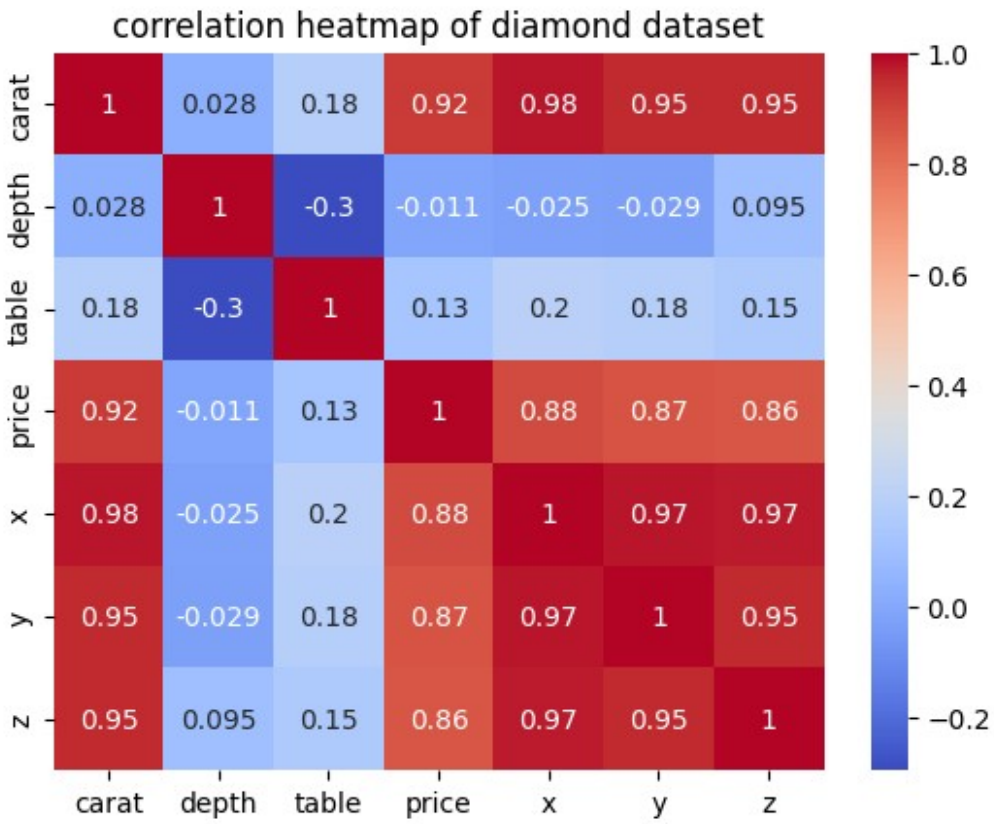
```
<ipython-input-23-dedf3b3bfc07>:5: FutureWarning: The default value of
numeric_only in DataFrame.corr is deprecated. In a future version, it
will default to False. Select only valid columns or specify the value
of numeric_only to silence this warning.
  correlation_matrix=iris.corr()
```




```
import seaborn as sns
import matplotlib.pyplot as plt
dia=sns.load_dataset("diamonds")
print(dia.head())
correlation_matrix=dia.corr()
sns.heatmap(correlation_matrix,annot= True,cmap="coolwarm")
plt.title("correlation heatmap of diamond dataset")
plt.show()
```

```
   carat      cut color clarity  depth  table  price     x     y     z
0   0.23    Ideal     E     SI2   61.5   55.0    326  3.95  3.98  2.43
1   0.21  Premium     E     SI1   59.8   61.0    326  3.89  3.84  2.31
2   0.23     Good     E     VS1   56.9   65.0    327  4.05  4.07  2.31
3   0.29  Premium     I     VS2   62.4   58.0    334  4.20  4.23  2.63
4   0.31     Good     J     SI2   63.3   58.0    335  4.34  4.35  2.75
```

```
<ipython-input-27-f52b79b91c93>:5: FutureWarning: The default value of
numeric_only in DataFrame.corr is deprecated. In a future version, it
will default to False. Select only valid columns or specify the value
of numeric_only to silence this warning.
  correlation_matrix=dia.corr()
```


correlation heatmap of diamond dataset
carat
depth
table
price
x
y
z
1
0.028
0.18
0.92
0.98
0.95
0.95
0.028
1
-0.3
-0.011
-0.025
-0.029
0.095
0.18
-0.3
1
0.13
0.2
0.18
0.15
0.92
-0.011
0.13
1
0.88
0.87
0.86
0.98
-0.025
0.2
0.88
1
0.97
0.97
0.95
-0.029
0.18
0.87
0.97
1
0.95
0.95
0.095
0.15
0.86
0.97
0.95
1
carat
depth
table
price
x
y
z
1.0
0.8
0.6
0.4
0.2
0.0
−0.2