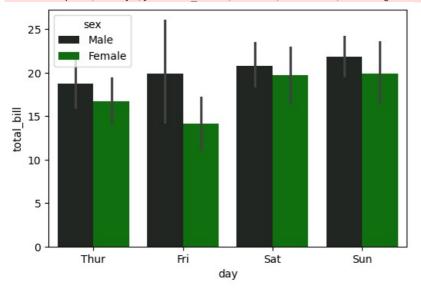
```
In [37]: import pandas as pd
          import matplotlib.pyplot as plt
          import seaborn as sns
          df = sns.load_dataset("tips")
          fig, axes = \overline{plt.subplots(2, 2, figsize=(12, 10))}
          print(df.head())
          print(df)
           total bill
                       tip
                                  sex smoker
                                              day
                                                      time size
                 16.99 1.01
                                                    Dinner
                                                               2
                              Female
                                          No
                                              Sun
        1
                 10.34 1.66
                                Male
                                          No
                                              Sun
                                                    Dinner
                                                               3
                 21.01 3.50
        2
                                Male
                                                               3
                                          No
                                              Sun
                                                    Dinner
        3
                 23.68
                        3.31
                                Male
                                          No
                                              Sun
                                                    Dinner
                                                               2
        4
                 24.59 3.61 Female
                                                               4
                                          No Sun Dinner
              total_bill tip
                                    sex smoker
                                                  day
                                                         time
        0
                   16.99 1.01
                                Female
                                            No
                                                  Sun
                                                       Dinner
                                                                   2
                   10.34 1.66
        1
                                   Male
                                            No
                                                  Sun
                                                       Dinner
                                                                   3
        2
                   21.01 3.50
                                   Male
                                                  Sun
                                                       Dinner
                                                                   3
                                            Nο
        3
                   23.68 3.31
                                   Male
                                            No
                                                  Sun
                                                      Dinner
                                                                   2
        4
                   24.59 3.61
                                Female
                                            No
                                                 Sun
                                                      Dinner
                                                                   4
                   29.03 5.92
        239
                                   Male
                                            No
                                                  Sat
                                                       Dinner
                                                                  3
        240
                   27.18 2.00
                                Female
                                           Yes
                                                 Sat
                                                       Dinner
                                                                   2
        241
                                                                   2
                   22.67
                          2.00
                                   Male
                                           Yes
                                                 Sat
                                                       Dinner
                                                                   2
        242
                   17.82
                          1.75
                                   Male
                                            No
                                                  Sat
                                                       Dinner
                                                                   2
        243
                   18.78 3.00
                                Female
                                            No
                                                Thur
                                                       Dinner
        [244 rows x 7 columns]
        1.0
                                                                      1.0
        0.8
                                                                      0.8
         0.6
                                                                      0.6
        0.4
                                                                      0.4
        0.2
                                                                      0.2
         0.0
                                                                      0.0
           0.0
                     0.2
                                0.4
                                          0.6
                                                    0.8
                                                              1.0
                                                                         0.0
                                                                                   0.2
                                                                                             0.4
                                                                                                       0.6
                                                                                                                  0.8
                                                                                                                            1.0
         1.0
                                                                      1.0
         0.8
                                                                      0.8
        0.6
                                                                      0.6
                                                                      0.4
         0.4
         0.2
                                                                      0.2
                                                                      0.0
         0.0
                     0.2
                                          0.6
                                                    0.8
                                                              1.0
                                                                                   0.2
                                                                                                       0.6
                                                                                                                  0.8
                                                                                                                            1.0
          plt.figure(figsize=(6,4))
```

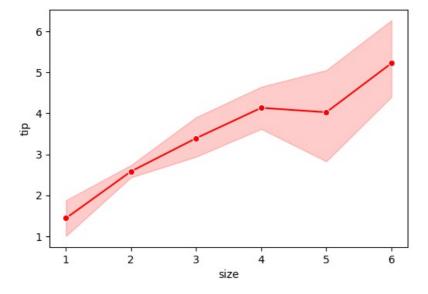
```
In [38]: plt.figure(figsize=(6,4))
    sns.barplot(x="day",y="total_bill",data=df,hue="sex",color="green")
    axes[0,0].set_title("Average Total Bill per Day (Bar Chart)")
    plt.show()
```

Setting a gradient palette using color= is deprecated and will be removed in v0.14.0. Set `palette='dark:green'` for the same effect.

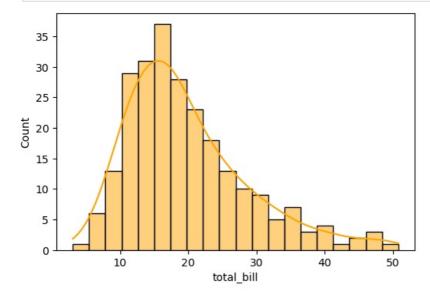
sns.barplot(x="day",y="total_bill",data=df,hue="sex",color="green")



```
In [39]: plt.figure(figsize=(6,4))
    sns.lineplot(x="size",y="tip",marker="o",data=df,color="red")
    axes[0,1].set_title("Average total bill per day (lineplot)")
    plt.show()
```



```
In [40]: plt.figure(figsize=(6,4))
    sns.histplot(df["total_bill"],kde=True,bins=20,color="orange")
    axes[1,0].set_title("total_bill per day (histogram)")
    plt.show()
```



```
In [41]: plt.figure(figsize=(6,4))
    sns.scatterplot(x="total_bill", y="tip", data=df,color="brown",s=100)
    axes[0,1].set_title("total_bill vs tip (scatter plot)")
    plt.show()
```

```
10 - 8 - 6 - 4 - 2 - 10 20 30 40 50 total_bill
```

```
In [58]: import pandas as pd
         import matplotlib.pyplot as plt
         import seaborn as sns
         df = sns.load_dataset("tips")
         fig, axes = plt.subplots(2, 2, figsize=(12, 10))
         print(df.head())
         print(df)
         plt.figure(figsize=(6,4))
         sns.barplot(x="day",y="total bill",data=df,hue="sex",color="green",ax=axes[0,0])
         axes[0,0].set_title("Average Total Bill per Day (Bar Chart)")
         sns.lineplot(x="size",y="tip",marker="o",data=df,color="red",ax=axes[0,1])
         axes[0,1].set_title("Average total bill per day (lineplot)")
         sns.histplot(df["total bill"],kde=True,bins=20,color="orange",ax=axes[1,0])
         axes[1,0].set_title("total_bill per day (histogram)")
         sns.scatterplot(x="total_bill", y="tip", data=df,color="brown",s=100,ax=axes[1,1]) \\ axes[1,1].set\_title("total_bill vs tip (scatter plot)")
         plt.tight_layout()
         plt.show()
           total bill tip
                               sex smoker day
                                                    time size
        0
                16.99 1.01 Female
                                        No Sun Dinner
                                                             2
                10.34 1.66
21.01 3.50
        1
                              Male
                                        No Sun Dinner
                                                             3
        2
                               Male
                                        No Sun Dinner
                                                             3
        3
                23.68 3.31
                               Male
                                        No Sun Dinner
        4
                24.59 3.61 Female
                                        No Sun Dinner
                                                             4
             total bill tip
                                 sex smoker day
                                                      time size
                  16.99 1.01 Female
                                              Sun Dinner
        0
                                       No
                                                                2
        1
                  10.34 1.66
                               Male
                                          No Sun Dinner
        2
                  21.01 3.50
                                 Male
                                              Sun Dinner
                                          No
                                                                3
        3
                  23.68 3.31
                                 Male
                                          No
                                               Sun Dinner
                                                                2
                  24.59 3.61 Female
        4
                                          No
                                               Sun Dinner
                                                                4
                                          . . .
                                                . . .
        239
                  29.03 5.92
                                 Male
                                          No
                                                Sat Dinner
                                                                3
        240
                  27.18 2.00
                               Female
                                          Yes
                                                Sat
                                                     Dinner
                  22.67 2.00
        241
                                 Male
                                          Yes
                                                Sat
                                                     Dinner
                                                                2
                  17.82 1.75
        242
                                 Male
                                          No
                                                Sat Dinner
```

[244 rows x 7 columns]

243

18.78 3.00 Female

```
C:\Users\venna_5k5d29a\AppData\Local\Temp\ipykernel_23668\458815619.py:9: FutureWarning:
Setting a gradient palette using color= is deprecated and will be removed in v0.14.0. Set `palette='dark:green'` for the same effect.
```

2

sns.barplot(x="day",y="total_bill",data=df,hue="sex",color="green",ax=axes[0,0])

No Thur Dinner

