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In [1]: import seaborn as sns import matplotlib.pyplot as plt

data_1 = sns.load_dataset("iris")

3.5

3.0

3.2

3.1

3.6

1.4

1.4

1.3

1.5

1.4

5.2

5.0

5.2

setosa

fare embarked

7.2500

0 71.2833

0 7.9250

0 53.1000

0 8.0500

0 13.0000

0 30.0000

2 23.4500

0 30.0000

0 7.7500

alive no

child

Age

36-40

31-35 21-25 16-20

46-60

Jan-15

Female

Gender

112

118

132

129

121

606

508

461

390

432

month

sns.set_theme(style="white", color_codes=True)

Male

Male

Male

sex smoker day

26-30

41-45

class

Third

Third

S Second

man

man

man

man

man

False

False

False

False

False

True

True NaN

First woman

Third woman

First woman

First woman

Third woman

First

Third

who adult_male deck embark_town alive alone

True NaN Southampton

NaN

NaN

Southampton

Southampton

Southampton

B Southampton yes

Cherbourg

Queenstown

Southampton yes

C Southampton yes False

no False

True

True

True

True

True

True

no False

Cherbourg yes False

0.2

setosa

setosa

setosa

setosa

setosa

2.3 virginica

1.9 virginica

2.0 virginica

- Bar Plots sns.set_theme(style="ticks", color_codes=True)

data_1 sepal_length sepal_width petal_length petal_width species 0 2 3 4

147

148

149

In [2]:

In [3]:

Out[3]:

Out[1]:

5.1 4.9 145 146

4.7 4.6 5.0 6.7 6.3 6.5 6.2 5.9

3.0 2.5 3.0 3.4 3.0

5.4 2.3 virginica 1.8 virginica 5.1 150 rows × 5 columns p = sns.barplot(x="species", y="petal_length", data=data_1, order=["virginica", "setosa"], color="grey", ci=None)

plt.show()

species

sex age sibsp parch

- Count Plot #importing libraries import seaborn as sns import matplotlib.pyplot as plt sns.set_theme(style="ticks", color_codes=True)

virginica

ship = sns.load_dataset("titanic") ship survived pclass 0 male 22.0

1 female 38.0 2

0

3

4

886

887

888

889

890

3 female 26.0 1 female 35.0 3 male 35.0 891 rows × 15 columns

male 27.0 1 female 19.0 3 female NaN male 26.0 male 32.0 p = sns.countplot(x="who", data=ship, hue="alive") p.set_title("Practicing Plots")

Practicing Plots

woman

100 import pandas as pd

man

plt.show()

#importing file info = pd.read_csv("info_course.csv") sns.set_theme(style="ticks", color_codes=True) p = sns.countplot(x="Gender", hue="Age", data=info) plt.show() 100 80 60 40 20 -

Out[6]:

In [7]:

In [8]:

In [9]:

f1 = sns.load_dataset("flights") fl year month passengers **0** 1949 Jan **1** 1949 Feb **2** 1949 Mar **3** 1949 Apr May **4** 1949 **139** 1960 Aug **140** 1960 Sep

141 1960 Oct **142** 1960 Nov **143** 1960 Dec 144 rows × 3 columns sns.set_style(style=None, rc=None) sns.set_style(style="whitegrid") plt.figure(figsize=(5,3)) fl_1 = sns.lineplot(x="month", y="passengers", data=fl)

200 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec - Box Plot

import seaborn as sns

21.01 3.50

23.68 3.31

import matplotlib.pyplot as plt

plt.show()

hotel_data = sns.load_dataset("tips") hotel_data Out[8]: tip total_bill 16.99 1.01 Female 10.34 1.66

2

24.59 3.61 Female 29.03 5.92 239 27.18 2.00 Female 240 22.67 2.00 241 242 243

17.82 1.75 18.78 3.00 Female 244 rows × 7 columns

Thur

Sat

plt.show()

10

milyy

Kitny pesy I

Thur

Sun In [10]:

plt.ylabel("Kitny pesy milyy", size=18)

sns.boxplot(x="day", y="tip", data=hotel_data, hue="smoker", showmeans=True, meanprops={"marker" : "*", "markersize" : "12", "markeredgecolor" : "red"}) plt.title("Sir Ammar Ki Di Hoyi Assignment", size=18) Sir Ammar Ki Di Hoyi Assignment smoker Yes

No Sun Dinner Male Sat Dinner Yes Sat Dinner Sat Dinner Male No Sat Dinner No Thur Dinner

No Sun Dinner

No Sun Dinner

No Sun Dinner

No Sun Dinner

time size

Male sns.boxplot(x="tip", y="day", data=hotel_data, hue="smoker", color="#fc03e3") <AxesSubplot:xlabel='tip', ylabel='day'> smoker Yes

- Customizing Plots

plt.xlabel("Konsa Din Tha", size=18)

Fri Sat Konsa Din Tha Sun

10