Seaborn - Exercise

```
import pandas as pd
import seaborn as sns
from google.colab import drive
import os
drive.mount('/content/drive')
os.chdir('/content/drive/MyDrive/')
for item in os.listdir():
  print(item)
print("----")
os.chdir('/content/drive/MyDrive/cloud/GitHub/AdvDataViz/Notebooks/')
for item in os.listdir():
  print(item)
print("----")
notebooks = "/content/drive/MyDrive/cloud/GitHub/AdvDataViz/Notebooks"
print(os.listdir(notebooks))
print("----")
file = "employee_attrition_.csv"
file_path = os.path.join(notebooks, file)
with open(file path, "r") as f:
  contents = f.read()

→ Mounted at /content/drive

    learningStore
    healthyCar
    startup
    cloud
    Artificial Intelligence
    03 Matplotlib - Exercise.ipynb
    02 Matplotlib.ipynb
    01 Python_Pandas.ipynb
    04 Continuous Variables - Histogram .ipynb
    05 Continuous Variables - Histogram - Exercise ipynb
    07 Continuous Variables - Boxplot - Exercise .ipynb
    03 Matplotlib - Exercise Solutions.ipynb
    05 Continuous Variables - Histogram - Exercise Solutions.ipynb
    06 Continuous Variables - Boxplot.ipynb
    08 Continuous Variables - Scatterplot.ipynb
    07 Continuous Variables - Boxplot - Exercise Solutions.ipynb
    09 Continuous Variables - Scatterplot - Exercise Solutions.ipynb
    09 Continuous Variables - Scatterplot - Exercise .ipynb
    10 Categorical Variables - Bar_Pie.ipynb
    12 Seaborn.ipynb
    11 Pandas Data Visualization.ipynb
    13 Seaborn - Exercise ipynb
    Top 50 US Tech Companies.csv
    13 Seaborn - Exercise Solution.ipynb
    15 Custom Modules.ipynb
    14 Functions.ipynb
    churn.csv
    student_performance.csv
    myplotlib.py
```

Dataset: Employee Attrition

```
#df = pd.read_csv("employee_attrition_.csv")
df = pd.read_csv(file_path)

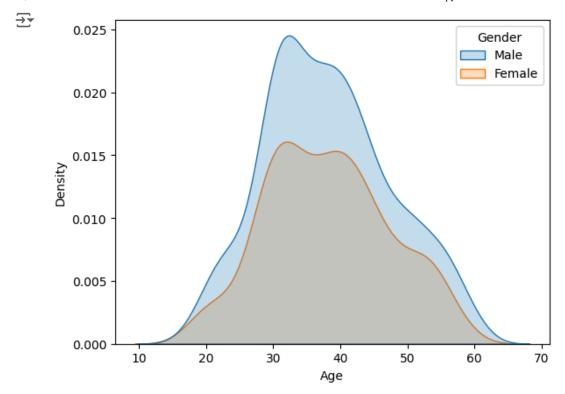
df = df.drop("EmployeeNumber", axis=1)
df = df.dropna()
df.head()
```

₹		Gender	Age	Education	Department	JobRole	JobSatisfaction	DistanceFromHome	Monthly
	0	Male	50.0	2	Research & Development	Research Director	4	1.0	
	1	Male	36.0	2	Research & Development	Manufacturing Director	2	6.0	
	2	Male	21.0	1	Sales	Sales Representative	2	7.0	
	4	Male	52.0	4	Research & Development	Healthcare Representative	2	7.0	
	5	Male	33.0	1	Research & Development	Manager	3	15.0	

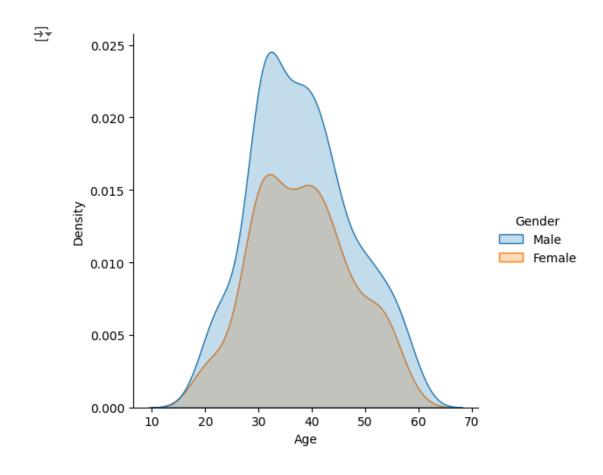
Next steps: Generate code with df View recommended plots New interactive sheet

1.) Create a filled density plot (kdeplot) of "Age". Set the hue to "Gender".

```
#sns.kdeplot(data=df);
sns.kdeplot(data=df, x="Age", hue="Gender", fill=True);
```



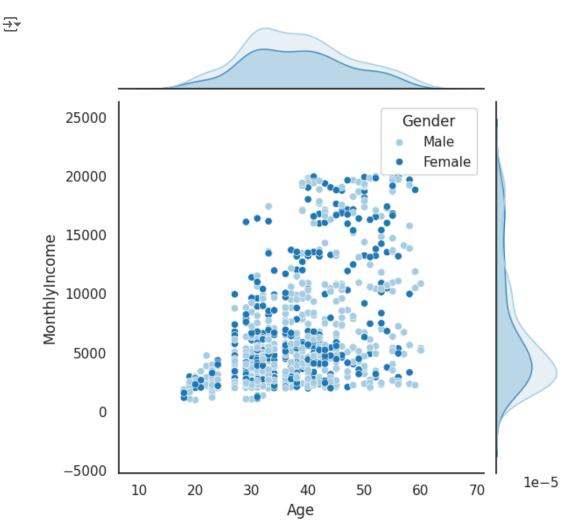
sns.displot(data=df, x="Age", kind="kde", hue="Gender", fill=True);



2.) Set Seaborn's theme style to "white" and the palette to "Paired".

Now, create a jointplot of "Age" and "MonthlyIncome". Set hue to "Gender".

```
#sns.jointplot(data=df);
sns.set_theme(style="white", palette="Paired")
sns.jointplot(data=df, x="Age", y="MonthlyIncome", hue="Gender");
```

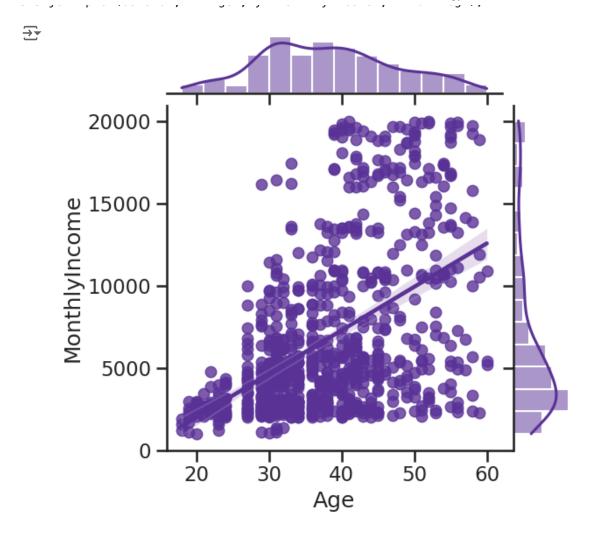


3.) Set Seaborn's theme context to "talk", style to "ticks", and the palette to "twighlight_shifted".

Now, create a joint plot of "Age" and "MonthlyIncome". Set kind to "reg".

```
#sns.jointplot(data=df);
sns.set_theme(context="talk", style="ticks", palette="twilight_shifted")
```

sns.iointplot(data=df. x="Age". v="MonthlvIncome". kind="reg"):



+ Code + Text