```
import seaborn as sns
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
```

add Codeadd Markdown

```
roll_no = [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15]
marks = [23,45,67,89,56,34,21,45,67,32,67,76,33,21,45]
sample_df = pd.DataFrame({"Rollno":roll_no, "Marks":marks})
sample_df.head()
```

[12]:

	Rollno	Marks
0	1	23
1	2	45
2	3	67
3	4	89
4	5	56

add Codeadd Markdown

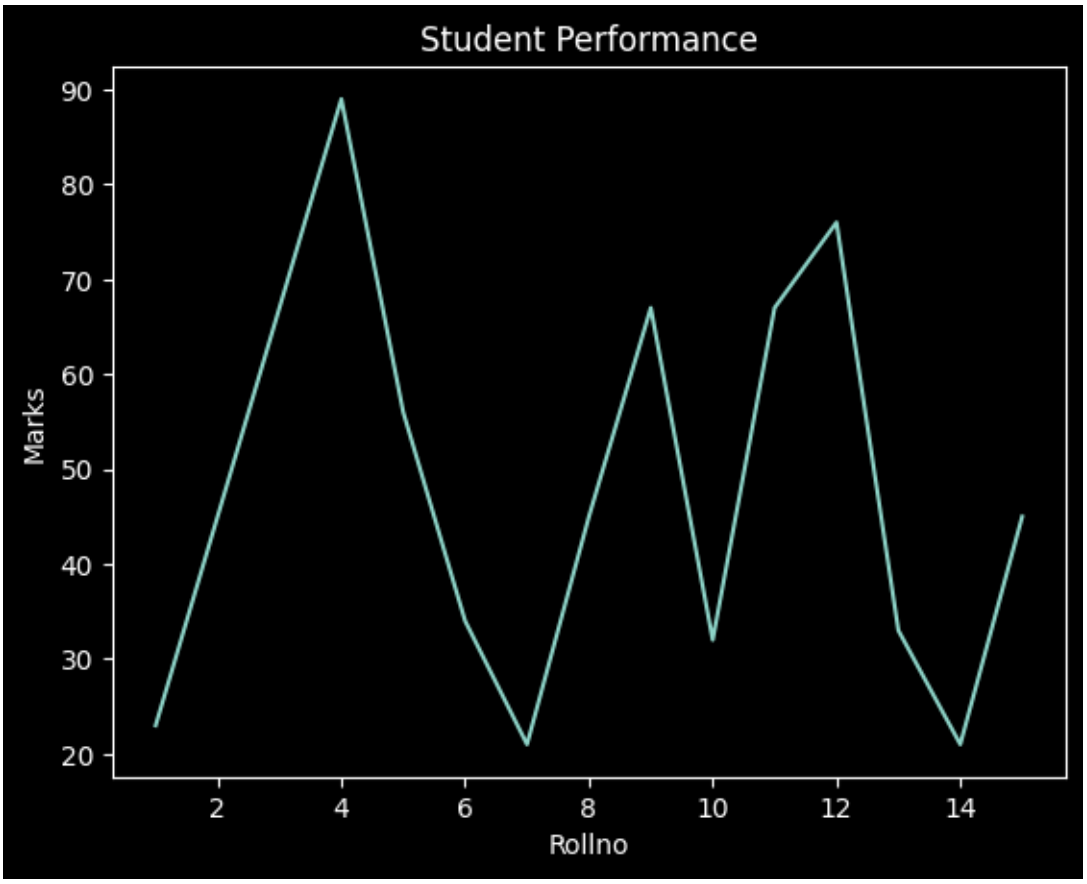
#Line Plots****

add Codeadd Markdown

```
sns.lineplot(x = 'Rollno', y='Marks', data = sample_df)
plt.title('Student Performance')
```

[15]:

```
Text(0.5, 1.0, 'Student Performance')
```



add Codeadd Markdown

```
seaborn_df = sns.load_dataset('planets')
seaborn_df.head()
```

[16]:

	method	number	orbital_period	mass	distance	year
0	Radial Velocity	1	269.300	7.10	77.40	2006
1	Radial Velocity	1	874.774	2.21	56.95	2008
2	Radial Velocity	1	763.000	2.60	19.84	2011
3	Radial Velocity	1	326.030	19.40	110.62	2007

	method	number	orbital_period	mass	distance	year
4	Radial Velocity	1	516.220	10.50	119.47	2009

add Codeadd Markdown

```
df = pd.read_csv('/kaggle/input/hr-dataset/hr_data.csv')
df.head()
```

[19]:

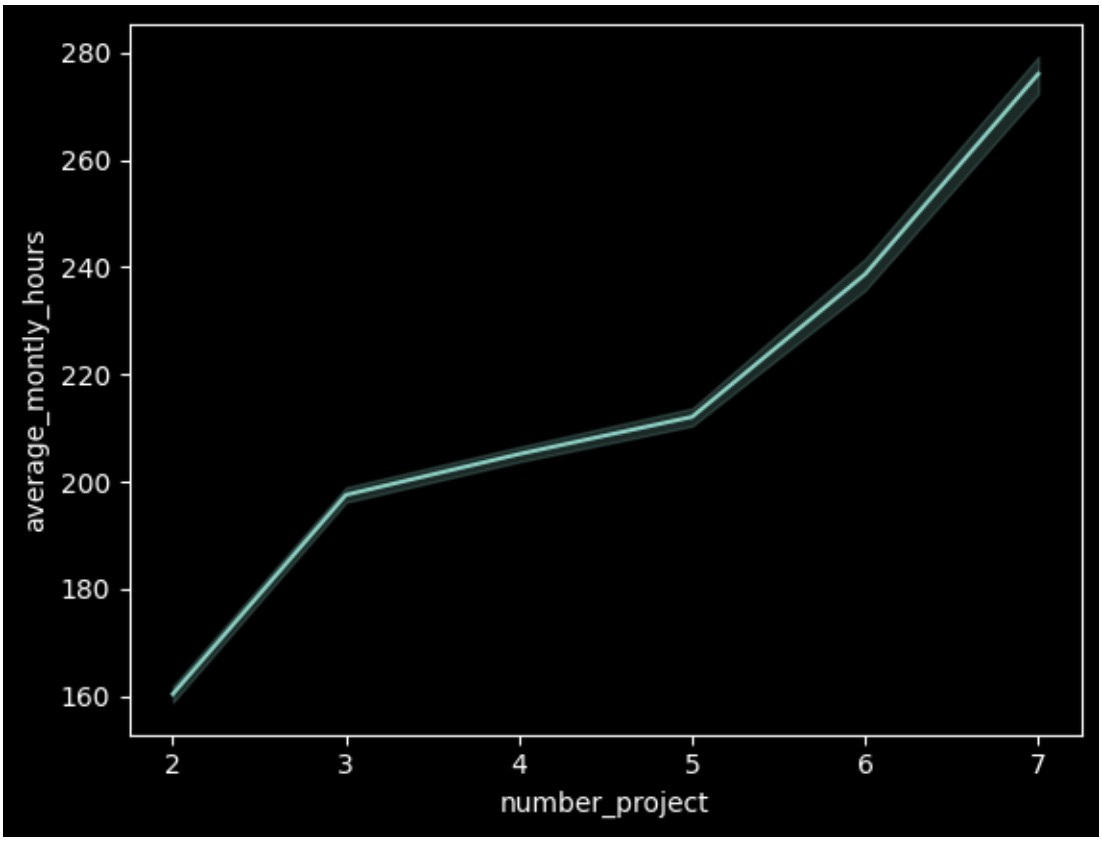
	employee_id	number_project	average_montly_hours	time_spend_company	Work_accident	left	promotion_last_5years	department	salary
0	1003	2	157	3	0	1	0	sales	low
1	1005	5	262	6	0	1	0	sales	medium
2	1486	7	272	4	0	1	0	sales	medium
3	1038	5	223	5	0	1	0	sales	low
4	1057	2	159	3	0	1	0	sales	low

add Codeadd Markdown

```
sns.lineplot(x ='number_project', y ='average_montly_hours', data = df)
```

[25]:

```
<AxesSubplot: xlabel='number_project', ylabel='average_montly_hours'>
```

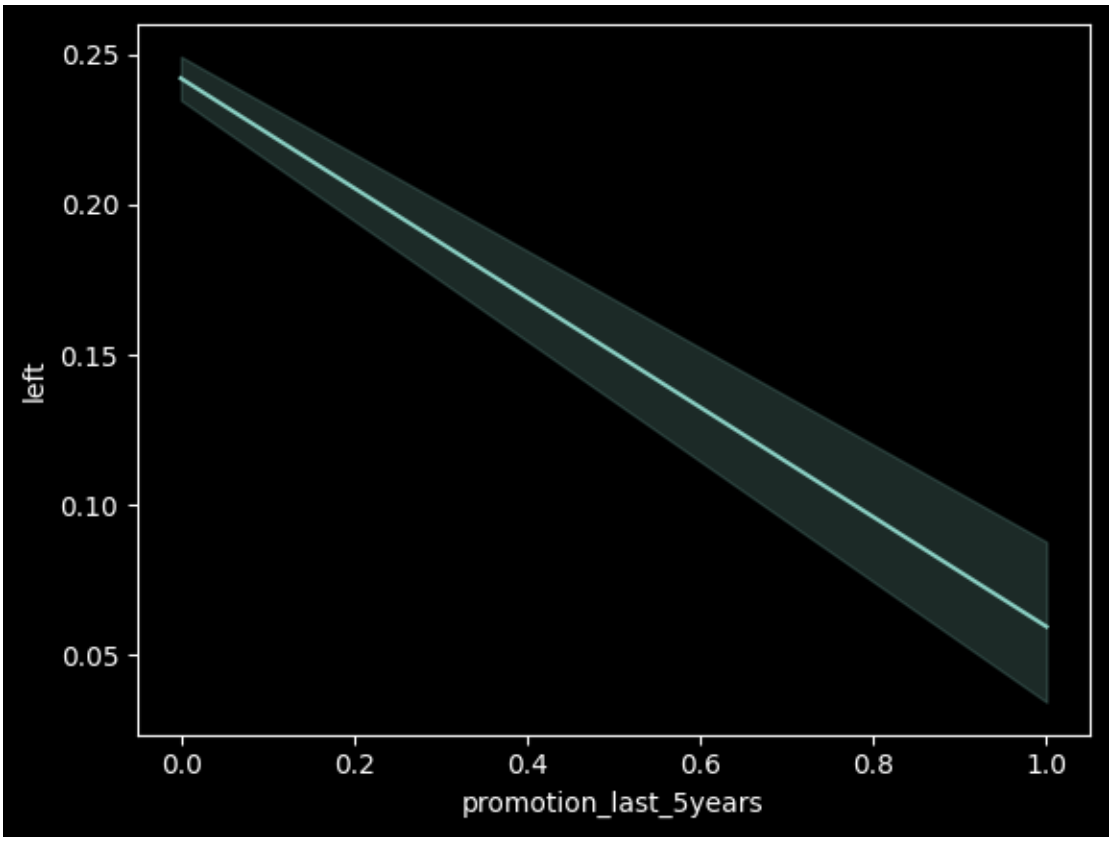


add Codeadd Markdown

sns.lineplot(x='promotion_last_5years', y='left', data= df)

[26]:

<AxesSubplot: xlabel='promotion_last_5years', ylabel='left'>

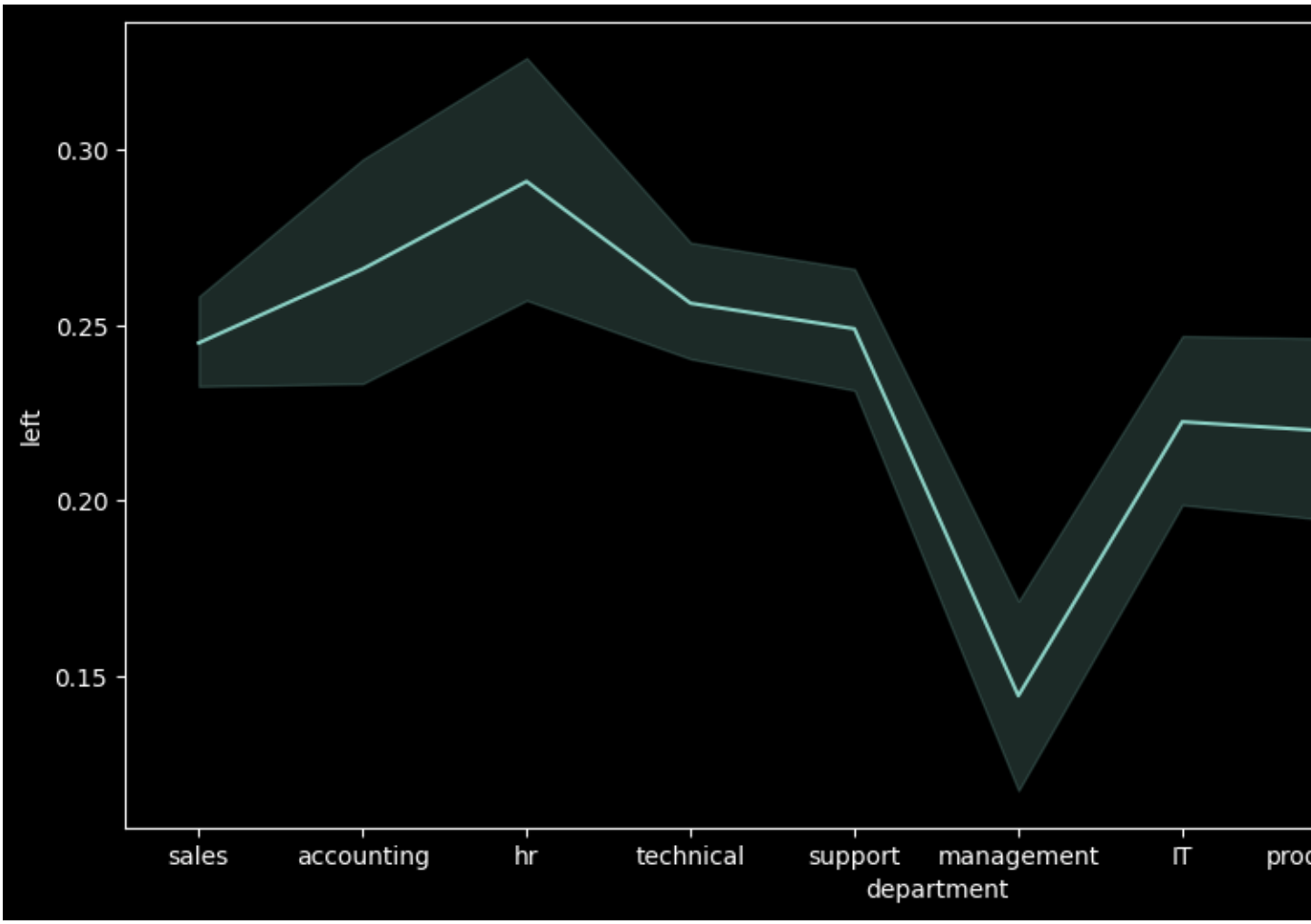


add Codeadd Markdown

```
plt.figure(figsize = (12,6))
sns.lineplot(x='department', y='left', data=df)
```

[28]:

```
<AxesSubplot: xlabel='department', ylabel='left'>
```

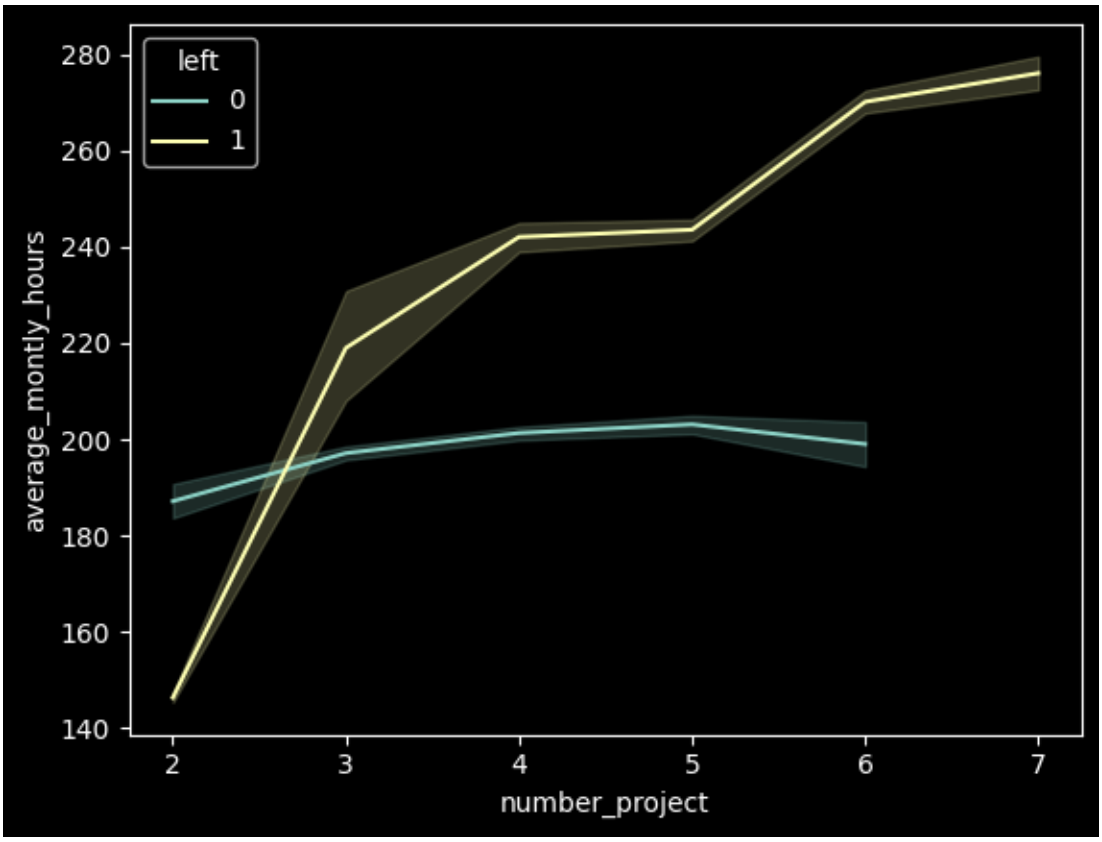


add Codeadd Markdown

```
sns.lineplot(x ='number_project', y ='average_montly_hours', data = df, hue='left')
```

[29]:

```
<AxesSubplot: xlabel='number_project', ylabel='average_montly_hours'>
```

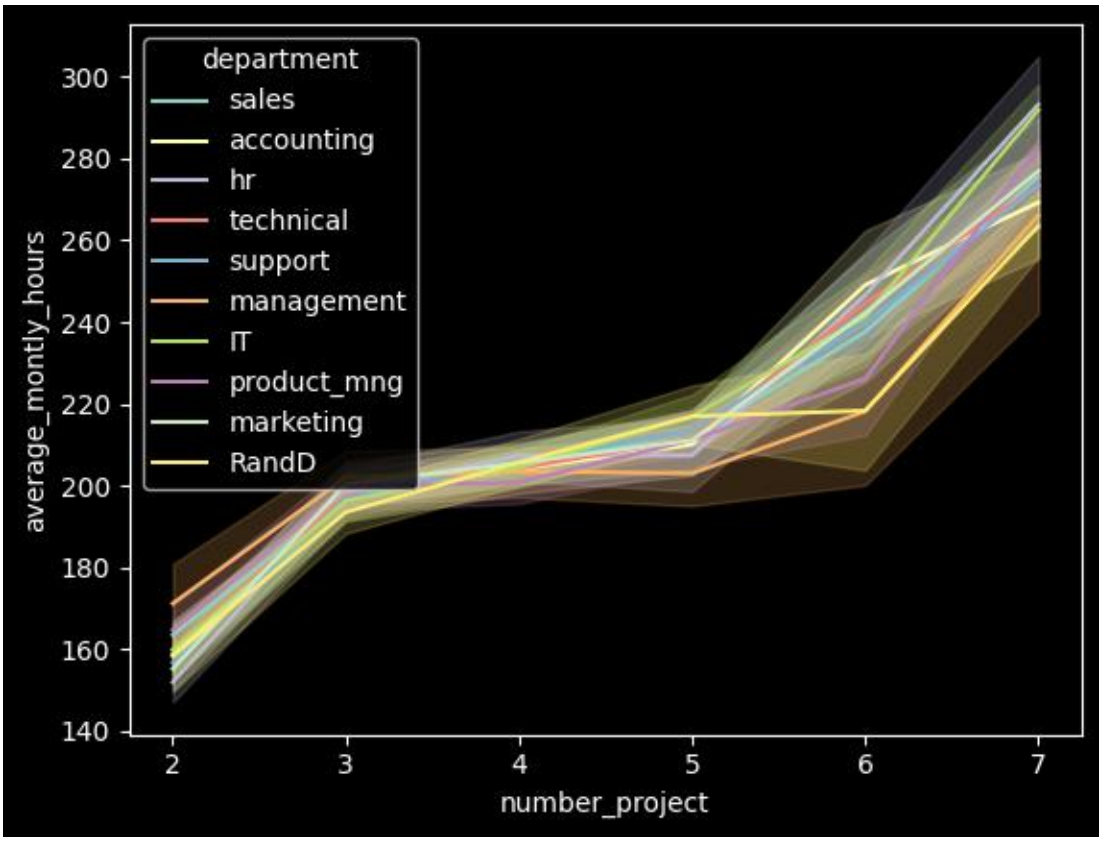


add Codeadd Markdown

```
sns.lineplot(x ='number_project', y ='average_montly_hours', data = df, hue='department')
```

[31]:

```
<AxesSubplot: xlabel='number_project', ylabel='average_montly_hours'>
```

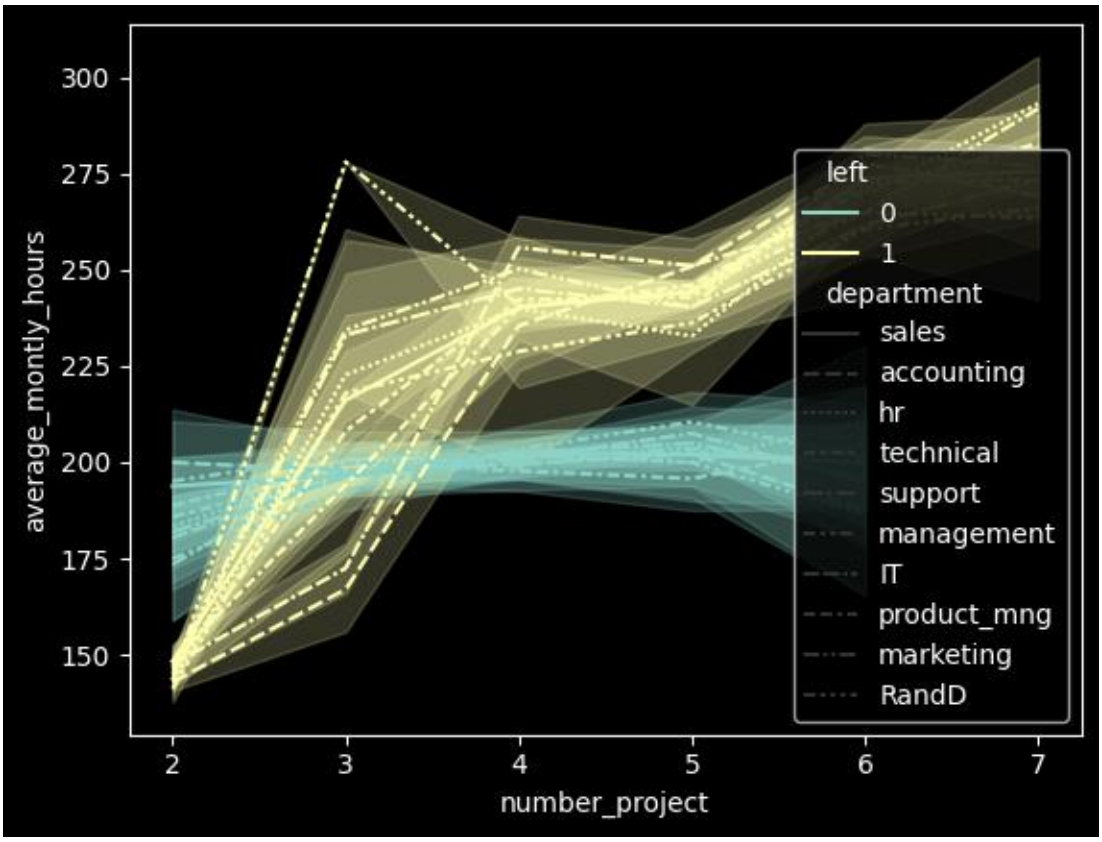


add Codeadd Markdown

```
sns.lineplot(x ='number_project', y ='average_montly_hours', data = df, hue='left', style ='department')
```

[32]:

<AxesSubplot: xlabel='number_project', ylabel='average_montly_hours'>

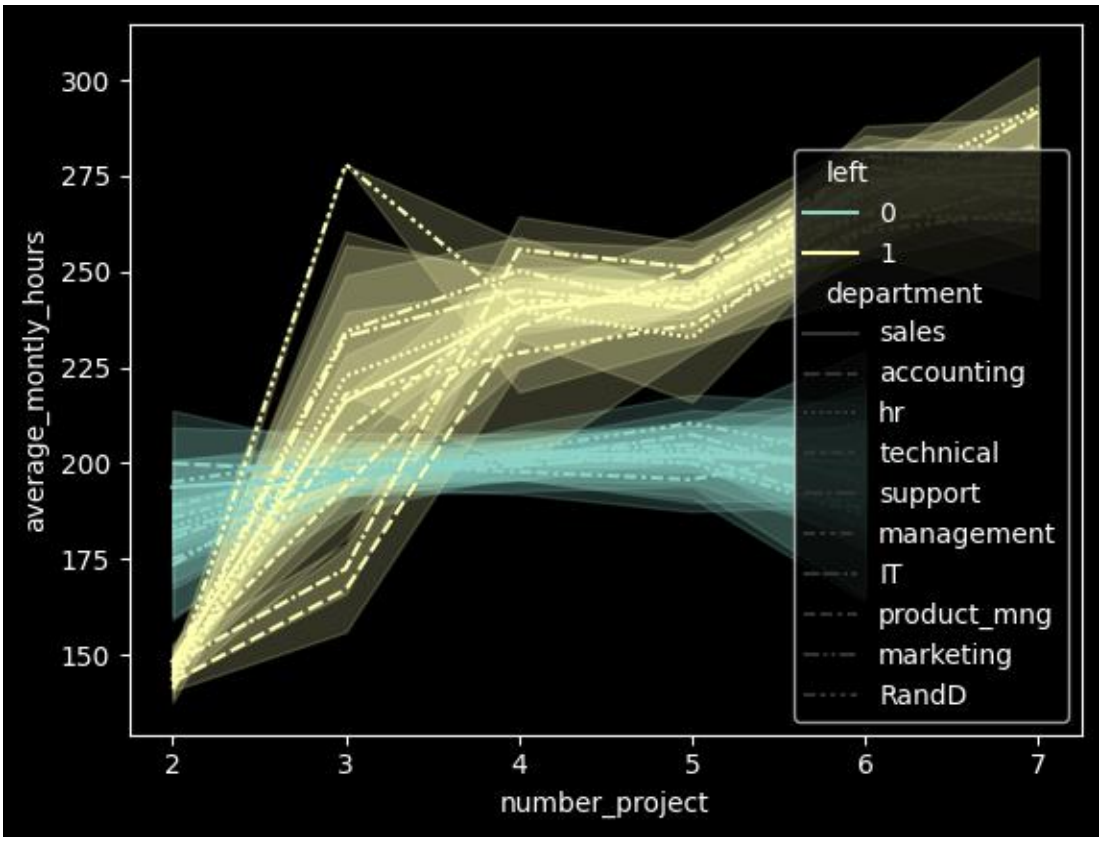


add Codeadd Markdown

```
sns.lineplot(x ='number_project', y ='average_montly_hours', data = df, hue='left', style='department',
legend='full')
```

[35]:

```
<AxesSubplot: xlabel='number_project', ylabel='average_montly_hours'>
```

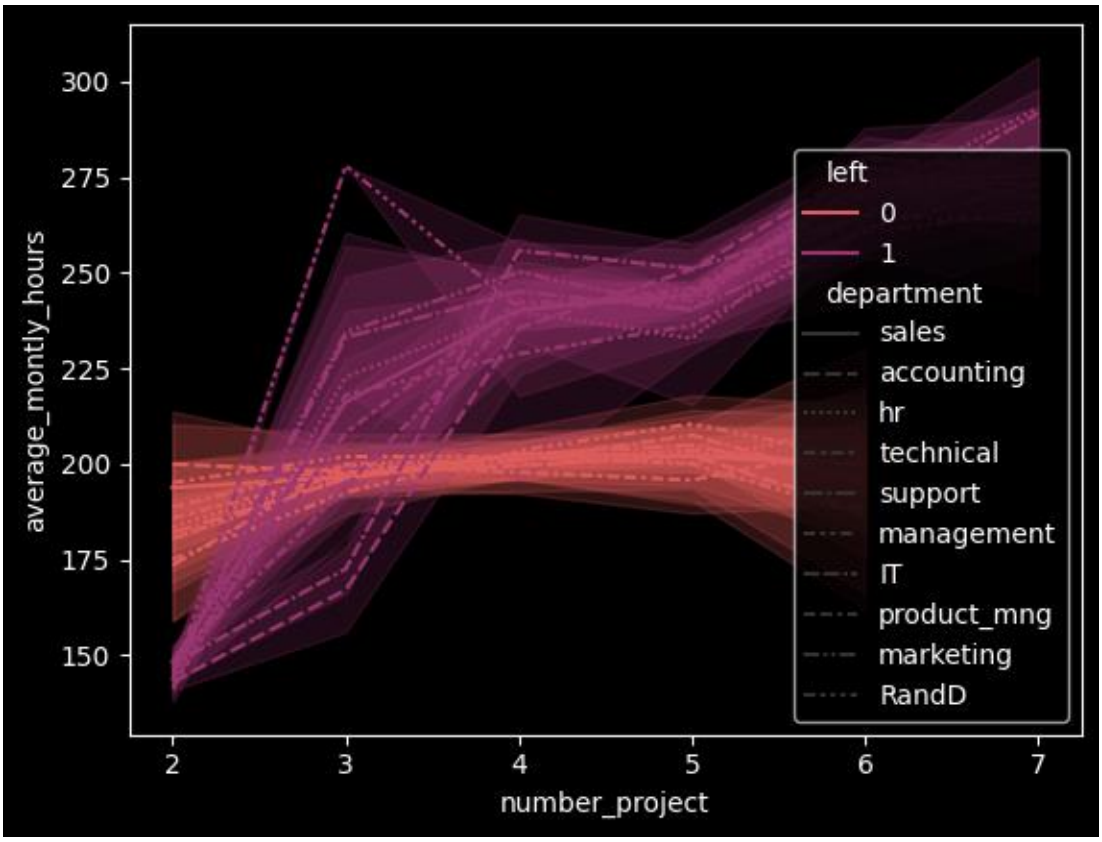


add Codeadd Markdown

```
sns.lineplot(x ='number_project', y ='average_montly_hours', data = df, hue='left', style = 'department', legend = 'full', palette = 'flare')
```

[38]:

```
<AxesSubplot: xlabel='number_project', ylabel='average_montly_hours'>
```



add Codeadd Markdown

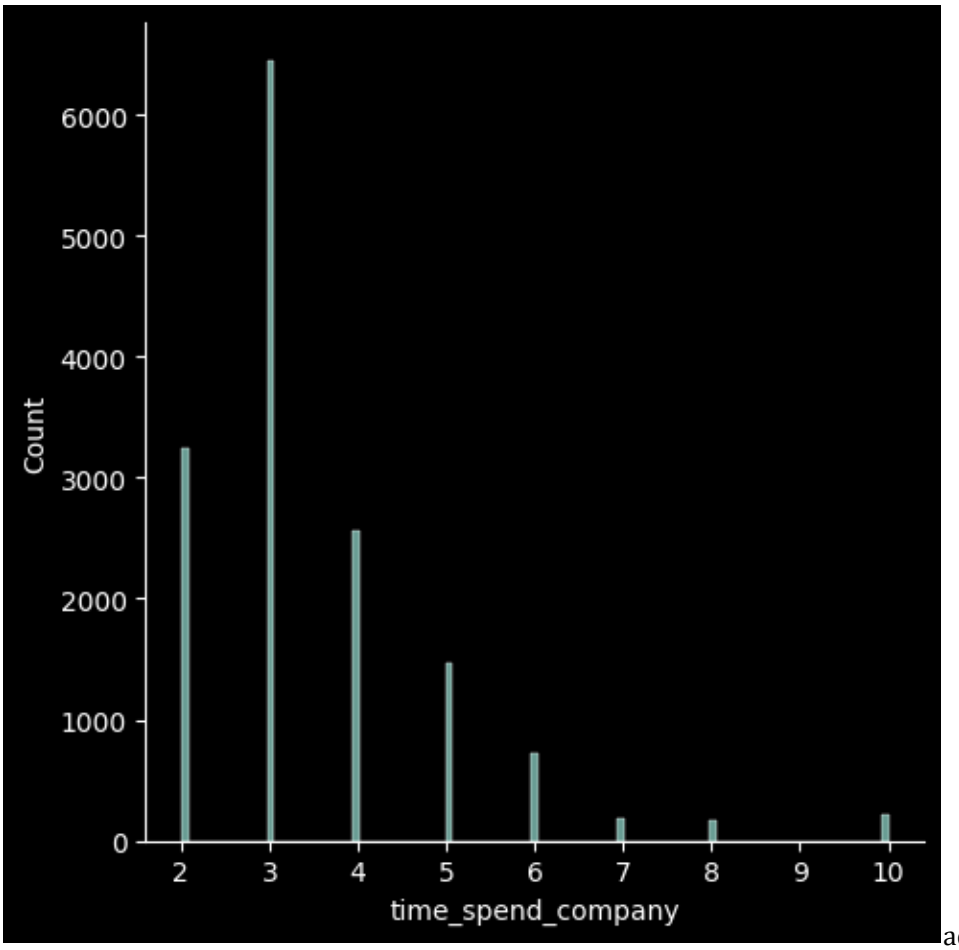
#Dist Plot****

add Codeadd Markdown

sns.displot(df['time_spend_company'])

[42]:

<seaborn.axisgrid.FacetGrid at 0x7b6aa41c4160>

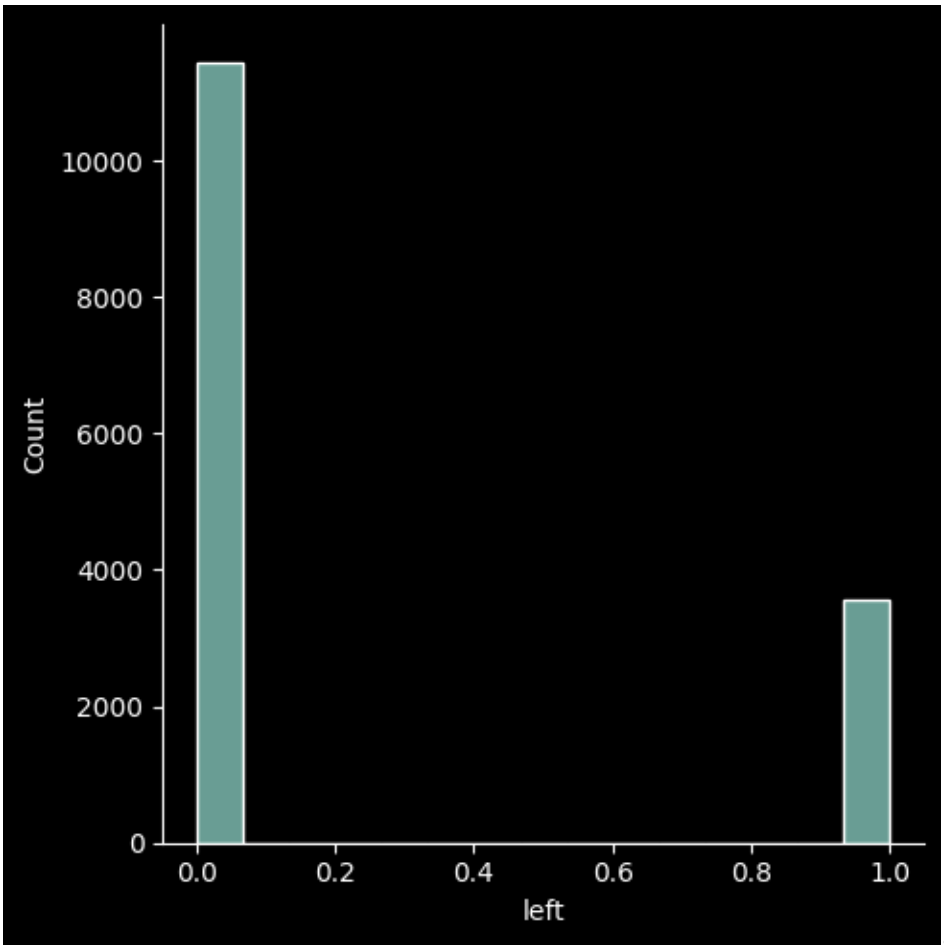


add Codeadd Markdown

sns.displot(df['left'])

[44]:

<seaborn.axisgrid.FacetGrid at 0x7b6a9fc2fdc0>

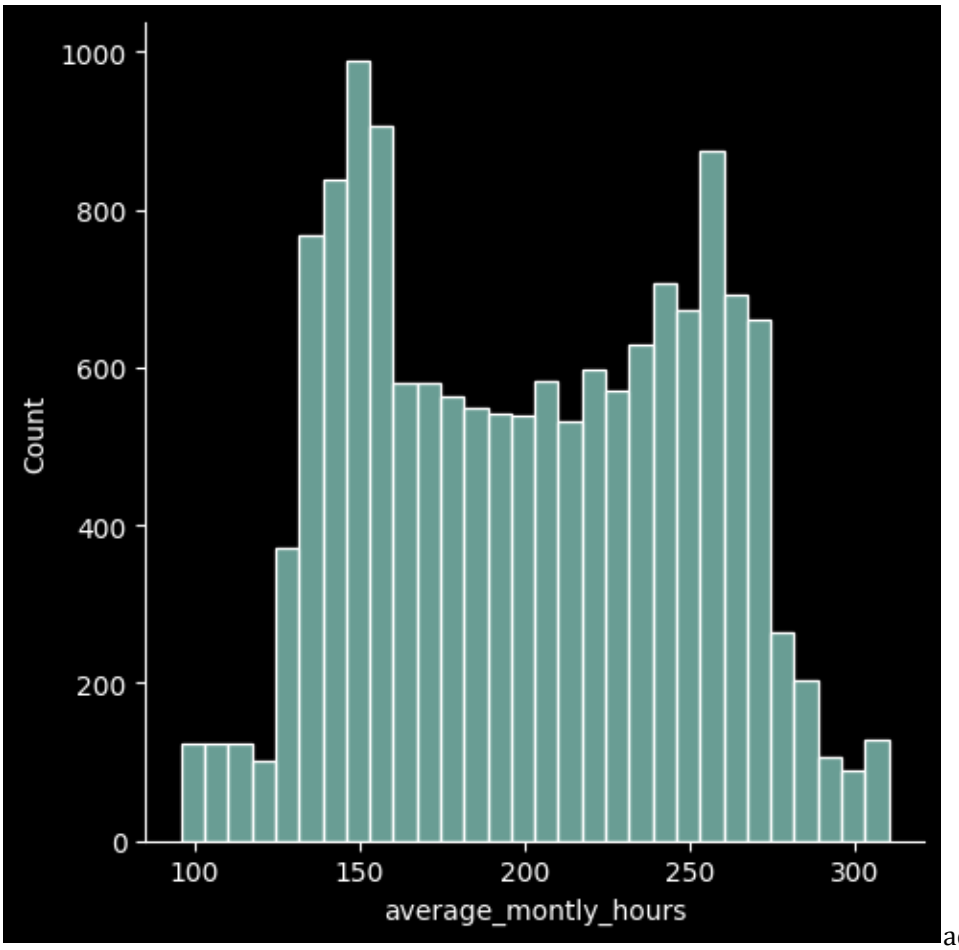


add Codeadd Markdown

sns.displot(df['average_montly_hours'])

[46]:

<seaborn.axisgrid.FacetGrid at 0x7b6a9fb498d0>



add Codeadd Markdown

df.describe()

[47]:

	employee_id	number_project	average_montly_hours	time_spend_company	Work_accident	left	promotion_last_5years
count	14999.000000	14999.000000	14999.000000	14999.000000	14999.000000	14999.000000	14999.000000
mean	45424.627575	3.803054	201.050337	3.498233	0.144610	0.238083	0.021268
std	25915.900127	1.232592	49.943099	1.460136	0.351719	0.425924	0.144281

	employee_id	number_project	average_montly_hours	time_spend_company	Work_accident	left	promotion_last_5years
min	1003.000000	2.000000	96.000000	2.000000	0.000000	0.000000	0.000000
25%	22872.500000	3.000000	156.000000	3.000000	0.000000	0.000000	0.000000
50%	45448.000000	4.000000	200.000000	3.000000	0.000000	0.000000	0.000000
75%	67480.500000	5.000000	245.000000	4.000000	0.000000	0.000000	0.000000
max	99815.000000	7.000000	310.000000	10.000000	1.000000	1.000000	1.000000

add Codeadd Markdown

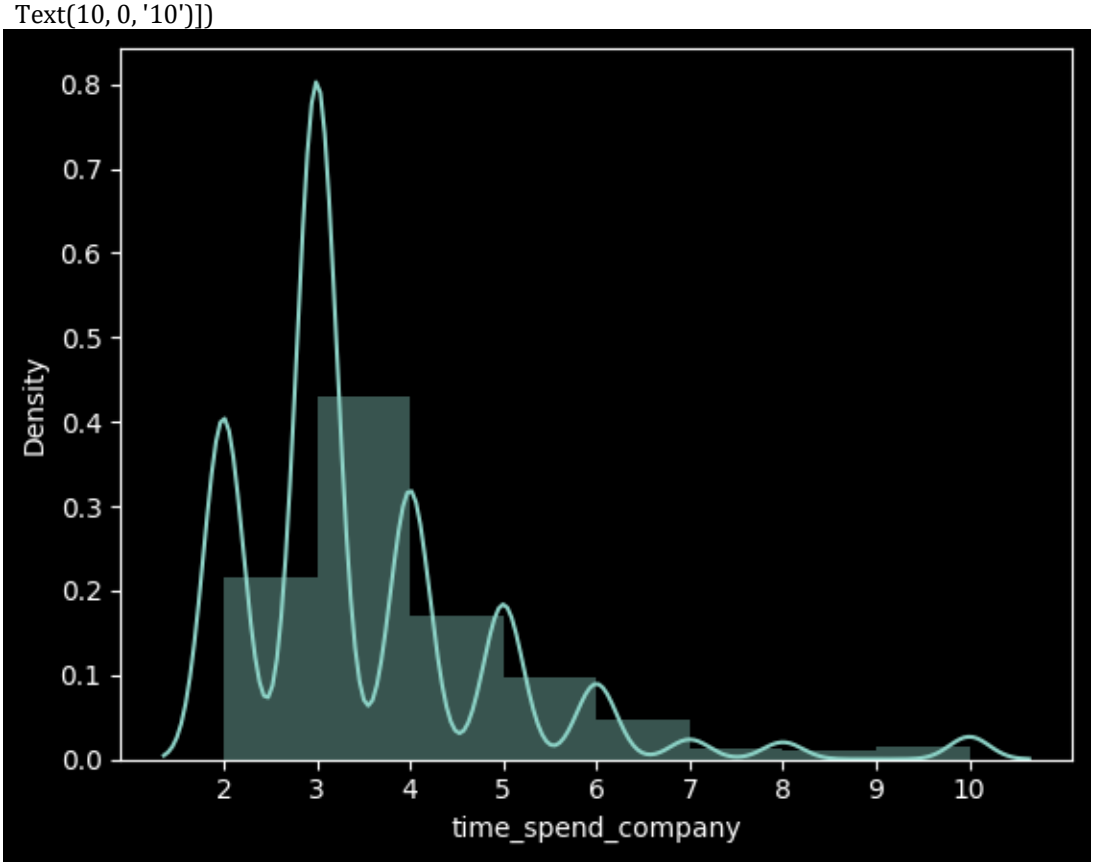
```
bins = [2,3,4,5,6,7,8,9,10]
sns.distplot(df['time_spend_company'], bins = bins)
plt.xticks(bins)
```

```
/tmp/ipykernel_34/2817653674.py:2: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with
similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

  sns.distplot(df['time_spend_company'], bins = bins)
```

[48]:

```
([<matplotlib.axis.XTick at 0x7b6aa70d9750>,
  <matplotlib.axis.XTick at 0x7b6aa70dbf10>,
  <matplotlib.axis.XTick at 0x7b6aa6e2b100>,
  <matplotlib.axis.XTick at 0x7b6aa70012a0>,
  <matplotlib.axis.XTick at 0x7b6aaa886e60>,
  <matplotlib.axis.XTick at 0x7b6aaa886980>,
  <matplotlib.axis.XTick at 0x7b6b025b7520>,
  <matplotlib.axis.XTick at 0x7b6aa70db2e0>,
  <matplotlib.axis.XTick at 0x7b6aa724a3b0>],
```

```
[Text(2, 0, '2'),
 Text(3, 0, '3'),
 Text(4, 0, '4'),
 Text(5, 0, '5'),
 Text(6, 0, '6'),
 Text(7, 0, '7'),
 Text(8, 0, '8'),
 Text(9, 0, '9'),
 Text(10, 0, '10')])
```



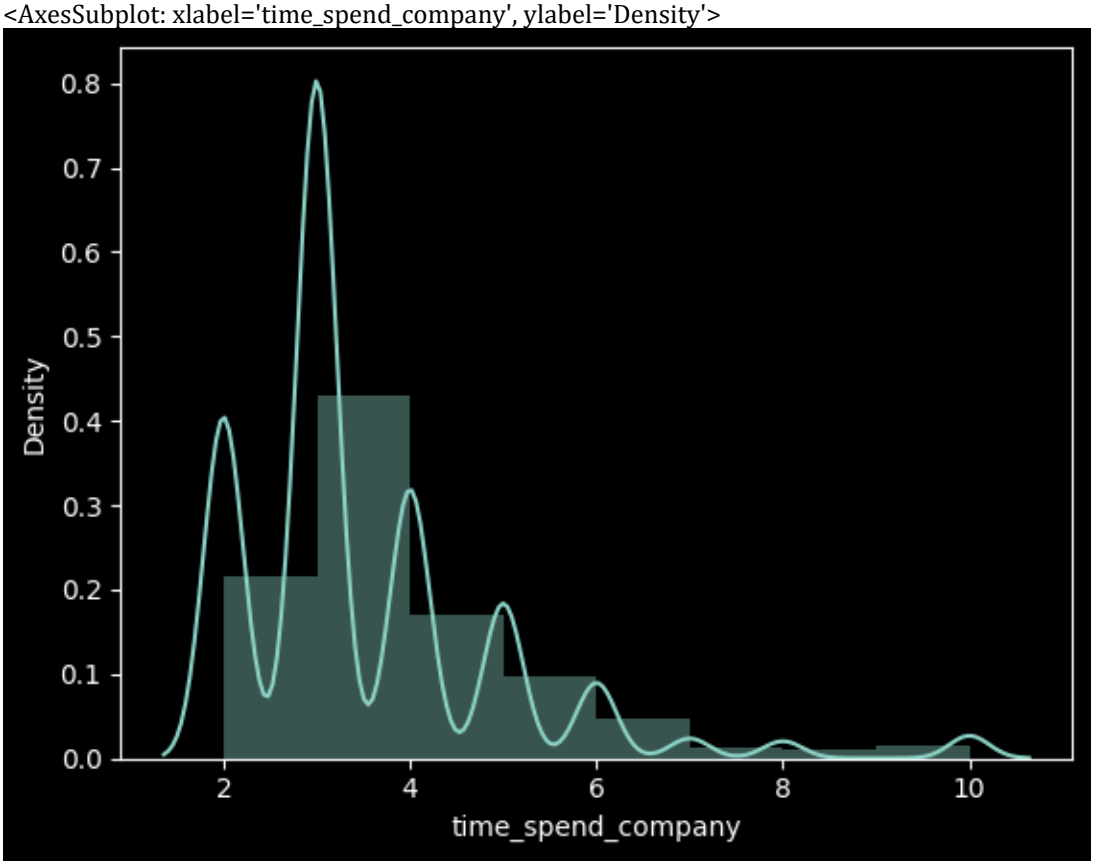
add Codeadd Markdown

```
sns.distplot(df['time_spend_company'], bins = bins)
```

```
/tmp/ipykernel_34/1754858012.py:1: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with
similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

  sns.distplot(df['time_spend_company'], bins = bins)
```

[49]:

<AxesSubplot: xlabel='time_spend_company', ylabel='Density'>



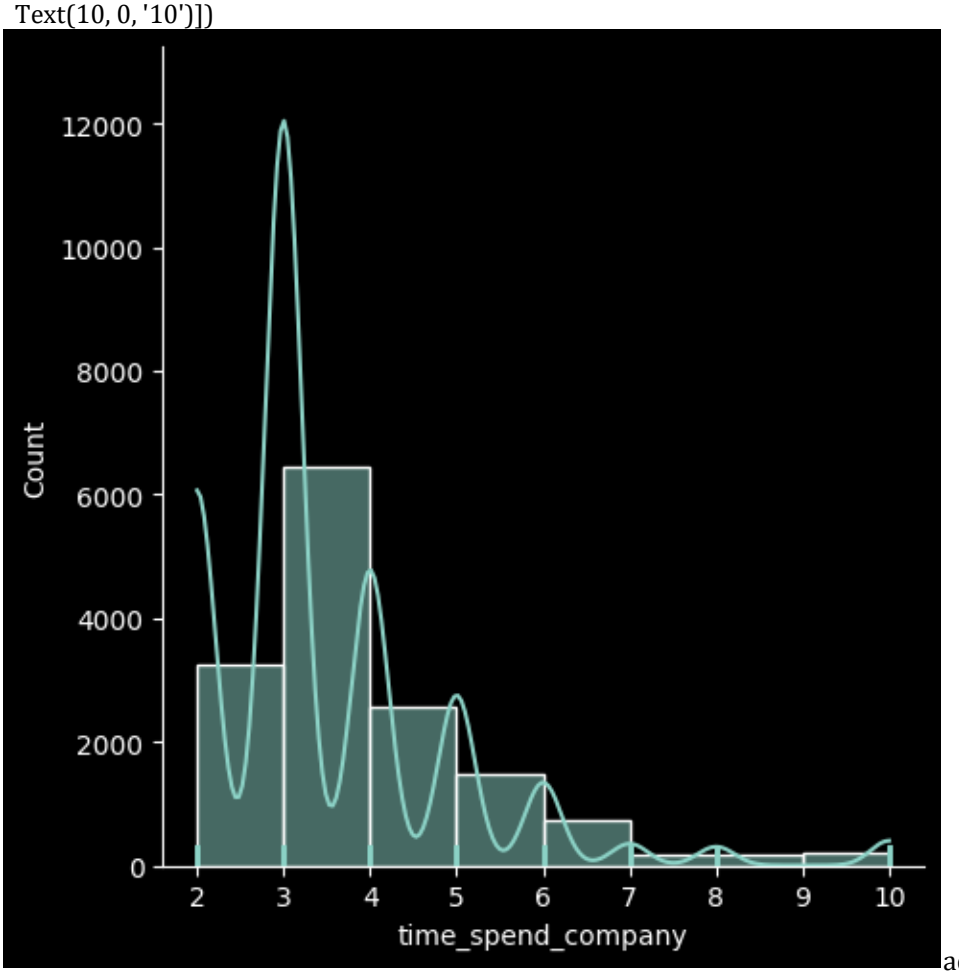
add Codeadd Markdown

```
sns.displot(df['time_spend_company'], bins = bins, kde = True, rug = True)
plt.xticks(bins)
```

[55]:

```
([<matplotlib.axis.XTick at 0x7b6a9ea77340>,
  <matplotlib.axis.XTick at 0x7b6a9ea77310>,
  <matplotlib.axis.XTick at 0x7b6a9ea92fb0>,
  <matplotlib.axis.XTick at 0x7b6a9ea938e0>,
  <matplotlib.axis.XTick at 0x7b6a9ea93fa0>,
  <matplotlib.axis.XTick at 0x7b6a9eab4a90>,
  <matplotlib.axis.XTick at 0x7b6a9eab7e50>,
  <matplotlib.axis.XTick at 0x7b6a9eada620>,
  <matplotlib.axis.XTick at 0x7b6a9eadae00>],
 [Text(2, 0, '2'),
  Text(3, 0, '3'),
  Text(4, 0, '4'),
  Text(5, 0, '5'),
  Text(6, 0, '6'),
  Text(7, 0, '7'),
  Text(8, 0, '8'),
```

Text(9, 0, '9'),
Text(10, 0, '10')])



add Codeadd Markdown

sns.distplot(df['time_spend_company'], bins = bins, rug = **True**, hist_kws ={'color':'red', 'edgecolor':'blue','linewidth': 3, 'alpha': 0.5})
/tmp/ipykernel_34/3071660938.py:1: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

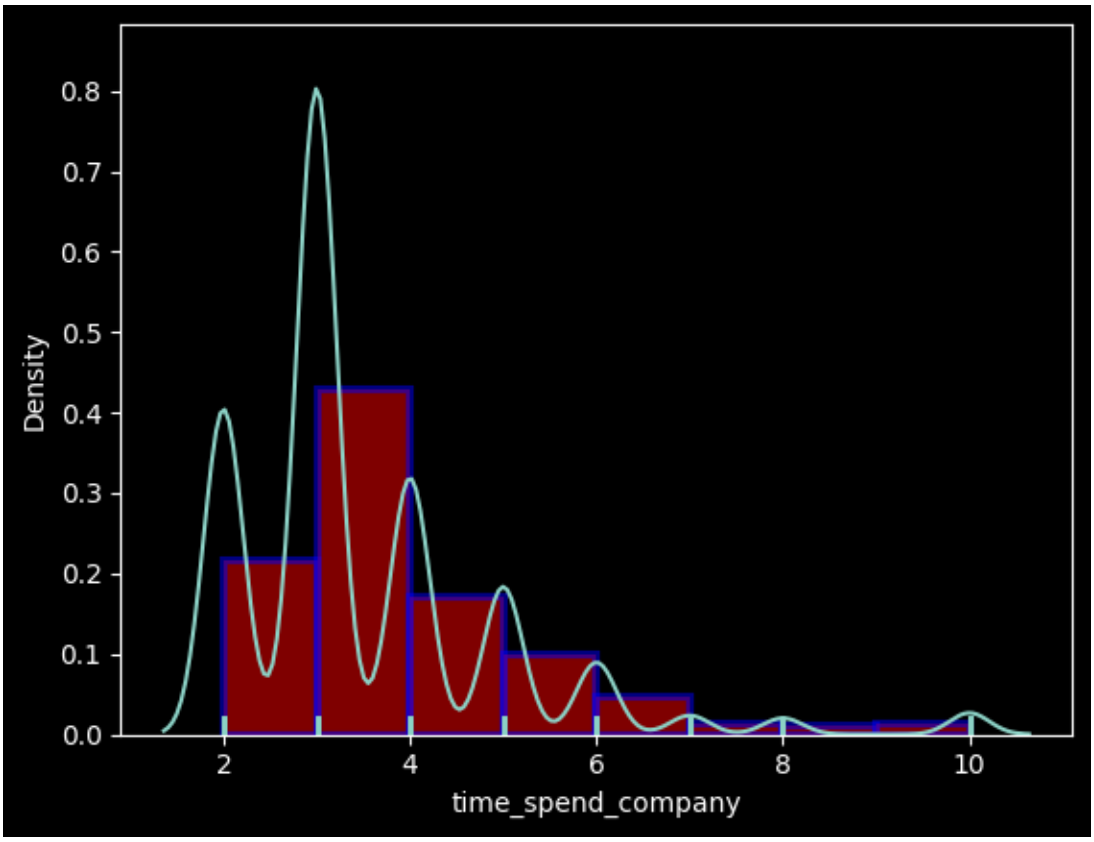
Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

sns.distplot(df['time_spend_company'], bins = bins, rug = True, hist_kws ={'color':'red', 'edgecolor':'blue','linewidth': 3, 'alpha': 0.5})

[56]:

<AxesSubplot: xlabel='time_spend_company', ylabel='Density'>



add Codeadd Markdown

sns.distplot(df['time_spend_company'], bins = bins, rug = **True**, hist_kws ={'color':'red', 'edgecolor':'blue','linewidth': 3, 'alpha': 0.5}, kde_kws = {'color':'orange', 'linewidth': 3})

/tmp/ipykernel_34/778030938.py:1: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

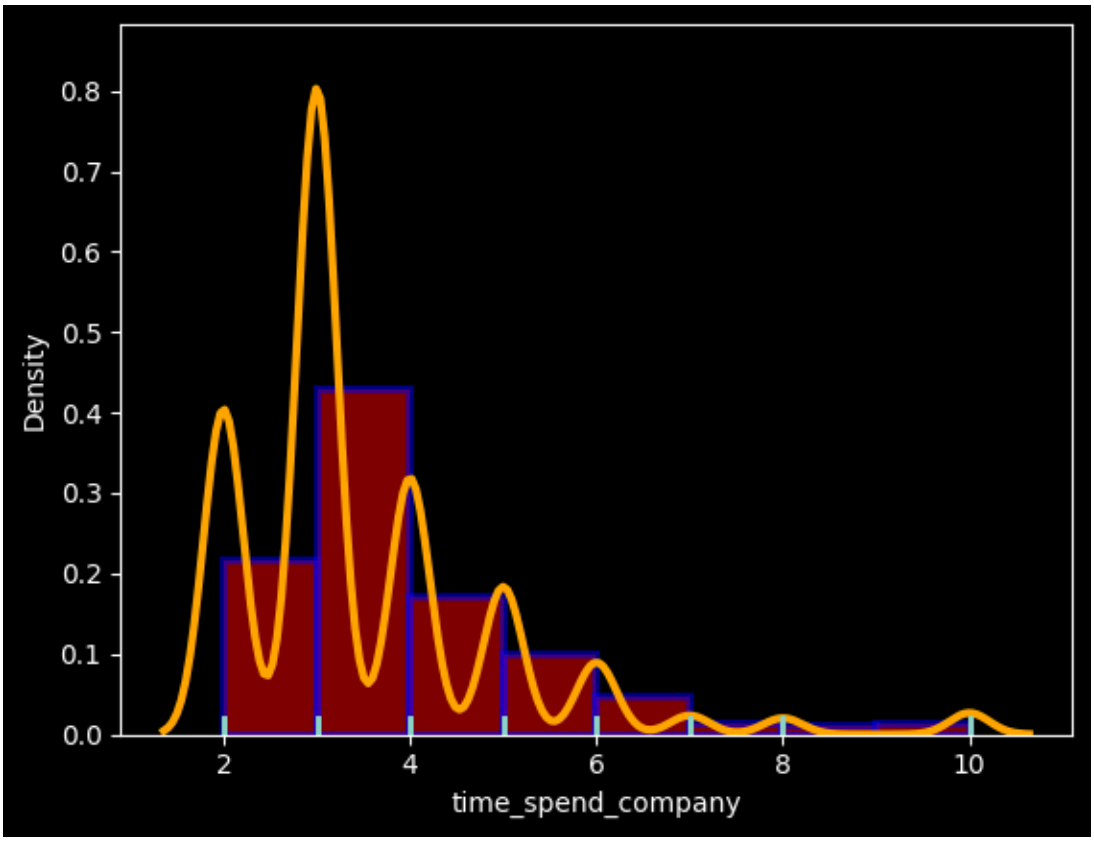
Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

sns.distplot(df['time_spend_company'], bins = bins, rug = True, hist_kws ={'color':'red', 'edgecolor':'blue','linewidth': 3, 'alpha': 0.5}, kde_kws = {'color':'orange', 'linewidth': 3})

[57]:

<AxesSubplot: xlabel='time_spend_company', ylabel='Density'>



add Codeadd Markdown

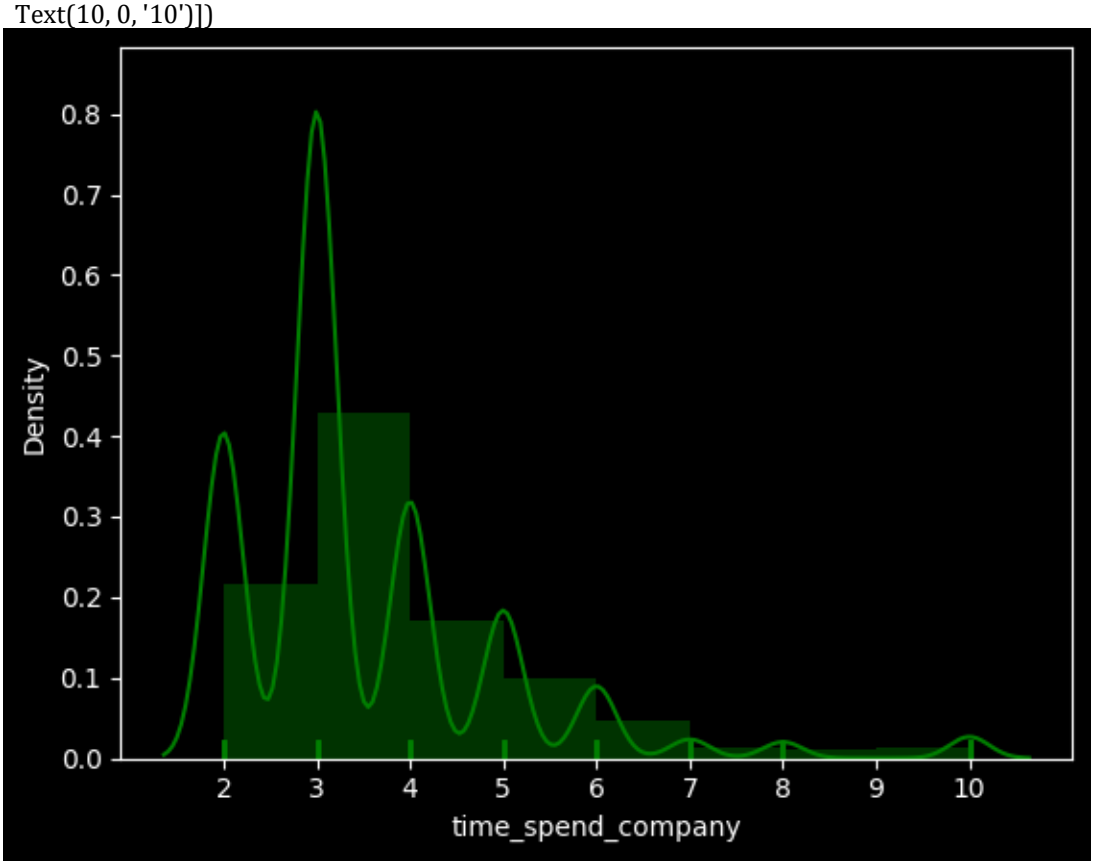
```
sns.distplot(df['time_spend_company'], bins = bins, rug = True, color = 'green')
plt.xticks(bins)
```

```
/tmp/ipykernel_34/2043402927.py:1: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with
similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

  sns.distplot(df['time_spend_company'], bins = bins, rug = True, color = 'green')
```

[58]:

```
([<matplotlib.axis.XTick at 0x7b6a9d23ee00>,
  <matplotlib.axis.XTick at 0x7b6a9d23f2e0>,
  <matplotlib.axis.XTick at 0x7b6a9d26ae60>,
  <matplotlib.axis.XTick at 0x7b6a9d23dcc0>,
  <matplotlib.axis.XTick at 0x7b6a9d2a5810>,
  <matplotlib.axis.XTick at 0x7b6a9d2a5ff0>,
  <matplotlib.axis.XTick at 0x7b6a9d2a4a90>,
```

```
 <matplotlib.axis.XTick at 0x7b6a9d23f2b0>,
 <matplotlib.axis.XTick at 0x7b6a9ca1e350>],
[Text(2, 0, '2'),
 Text(3, 0, '3'),
 Text(4, 0, '4'),
 Text(5, 0, '5'),
 Text(6, 0, '6'),
 Text(7, 0, '7'),
 Text(8, 0, '8'),
 Text(9, 0, '9'),
 Text(10, 0, '10')])
```



add Codeadd Markdown

#Scatter plot****

add Codeadd Markdown

```
titanic_df = sns.load_dataset('titanic')
titanic_df.head()
```

[61]:

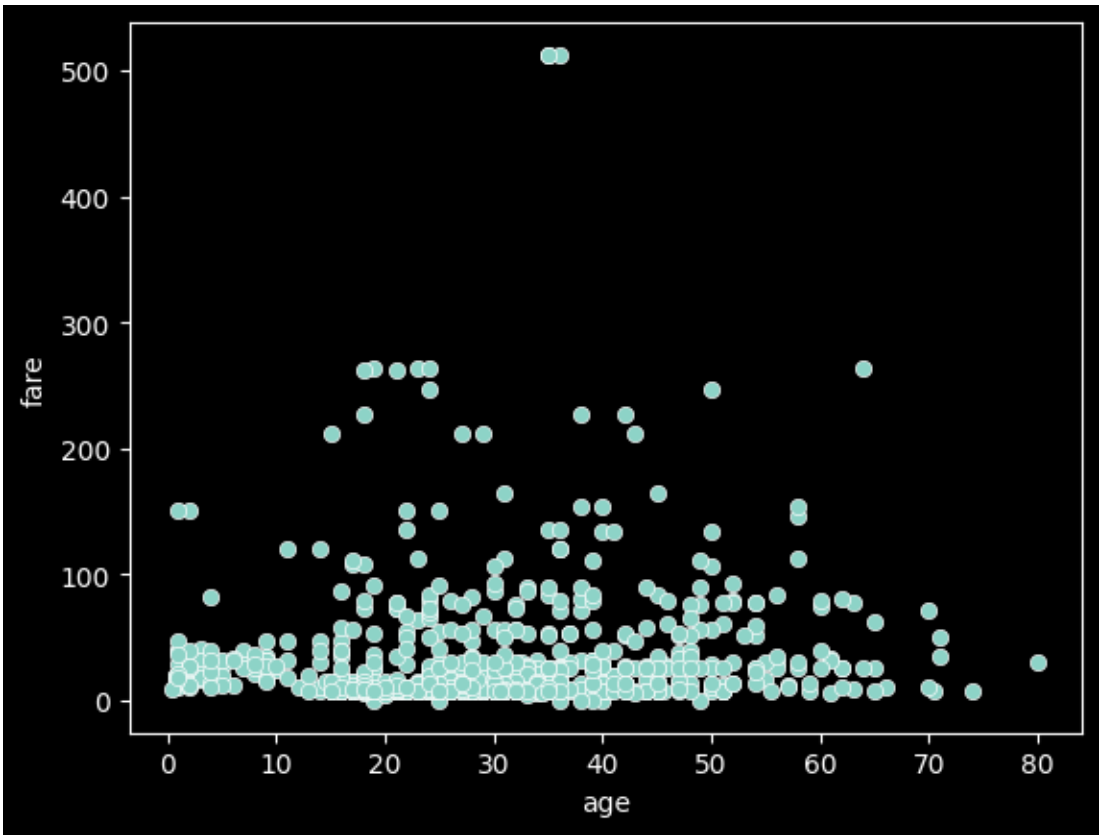
	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	embark_town	alive	alone
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN	Southampton	no	False
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	C	Cherbourg	yes	False
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN	Southampton	yes	True
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C	Southampton	yes	False
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	Southampton	no	True

add Codeadd Markdown

```
sns.scatterplot(x = 'age', y = 'fare', data = titanic_df)
```

[65]:

```
<AxesSubplot: xlabel='age', ylabel='fare'>
```

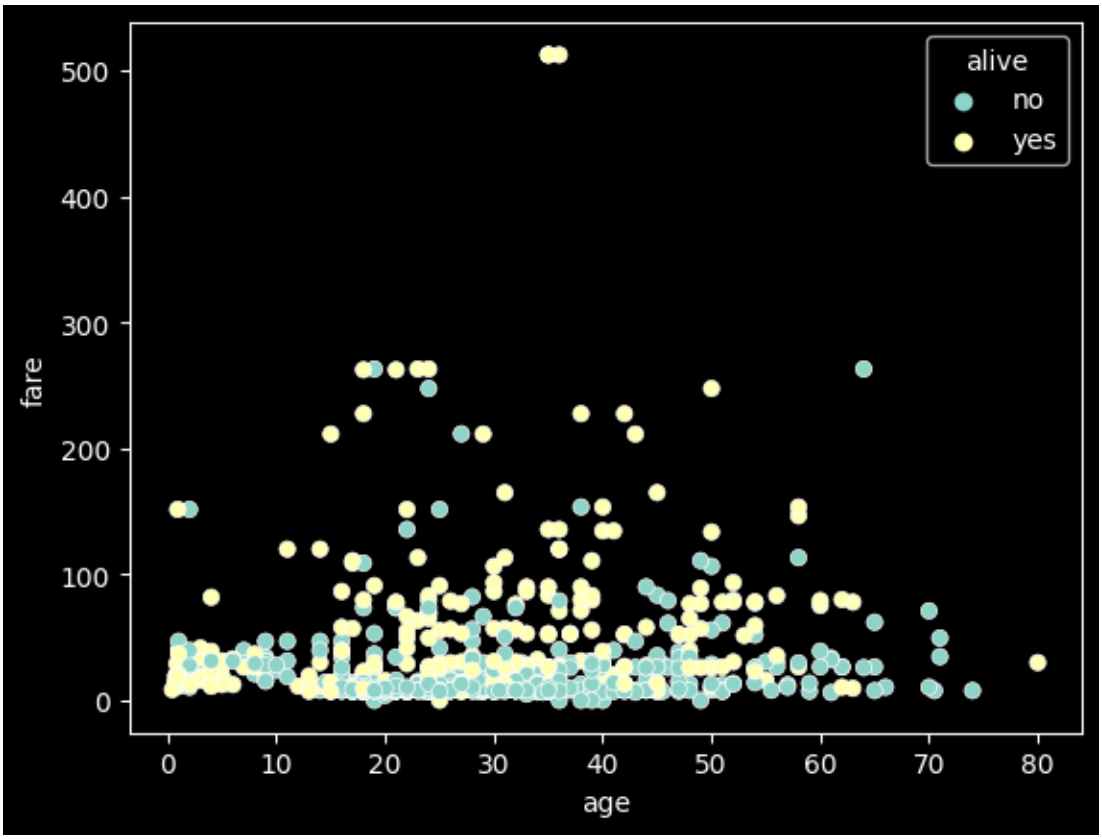


add Codeadd Markdown

```
sns.scatterplot(x = 'age', y = 'fare', data = titanic_df, hue = 'alive')
```

[63]:

<AxesSubplot: xlabel='age', ylabel='fare'>

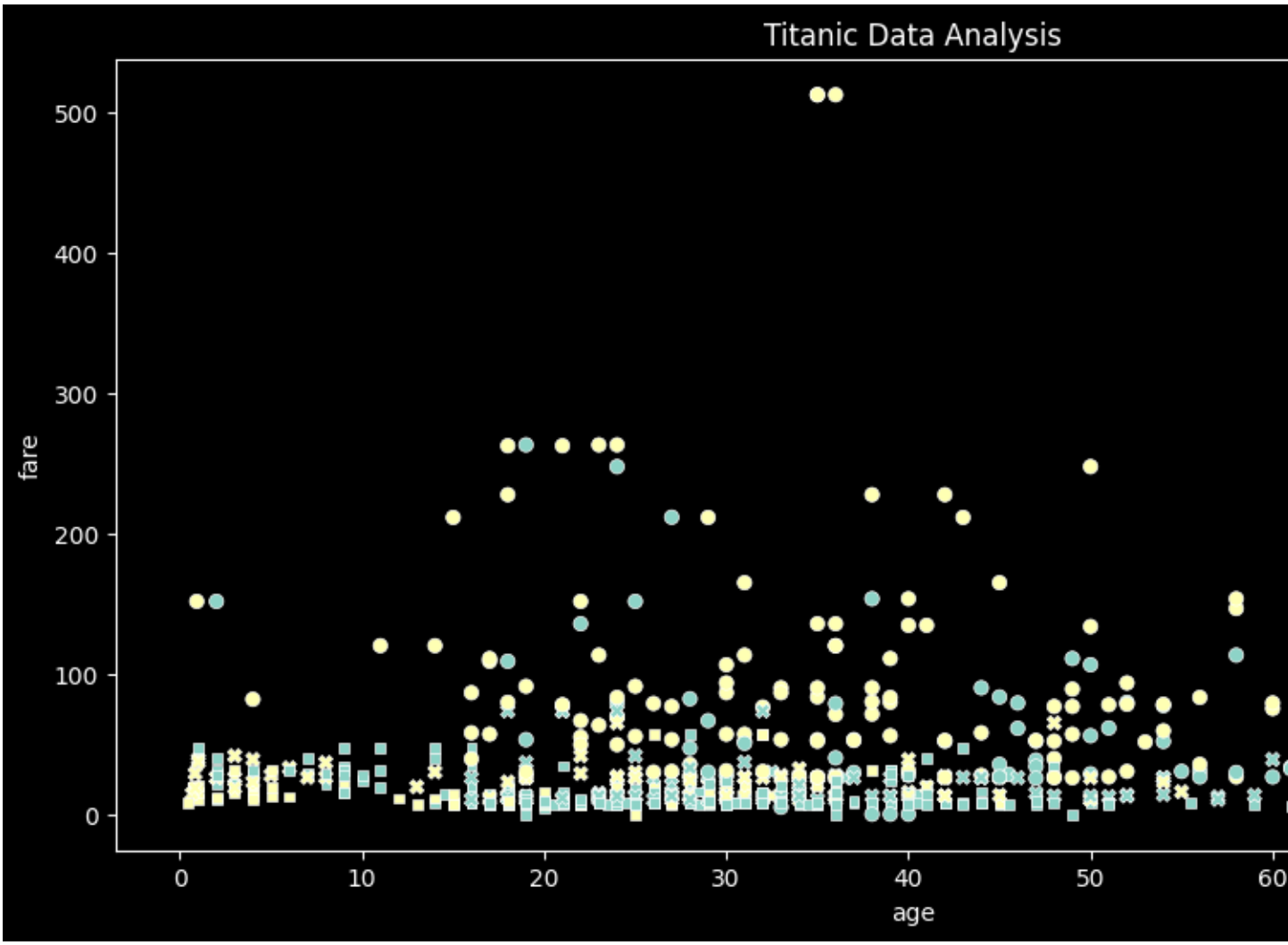


add Codeadd Markdown

```
plt.figure(figsize = (12,6))
sns.scatterplot(x = 'age', y = 'fare', data =titanic_df, hue = 'alive', style = 'class')
plt.title('Titanic Data Analysis')
```

[66]:

```
Text(0.5, 1.0, 'Titanic Data Analysis')
```

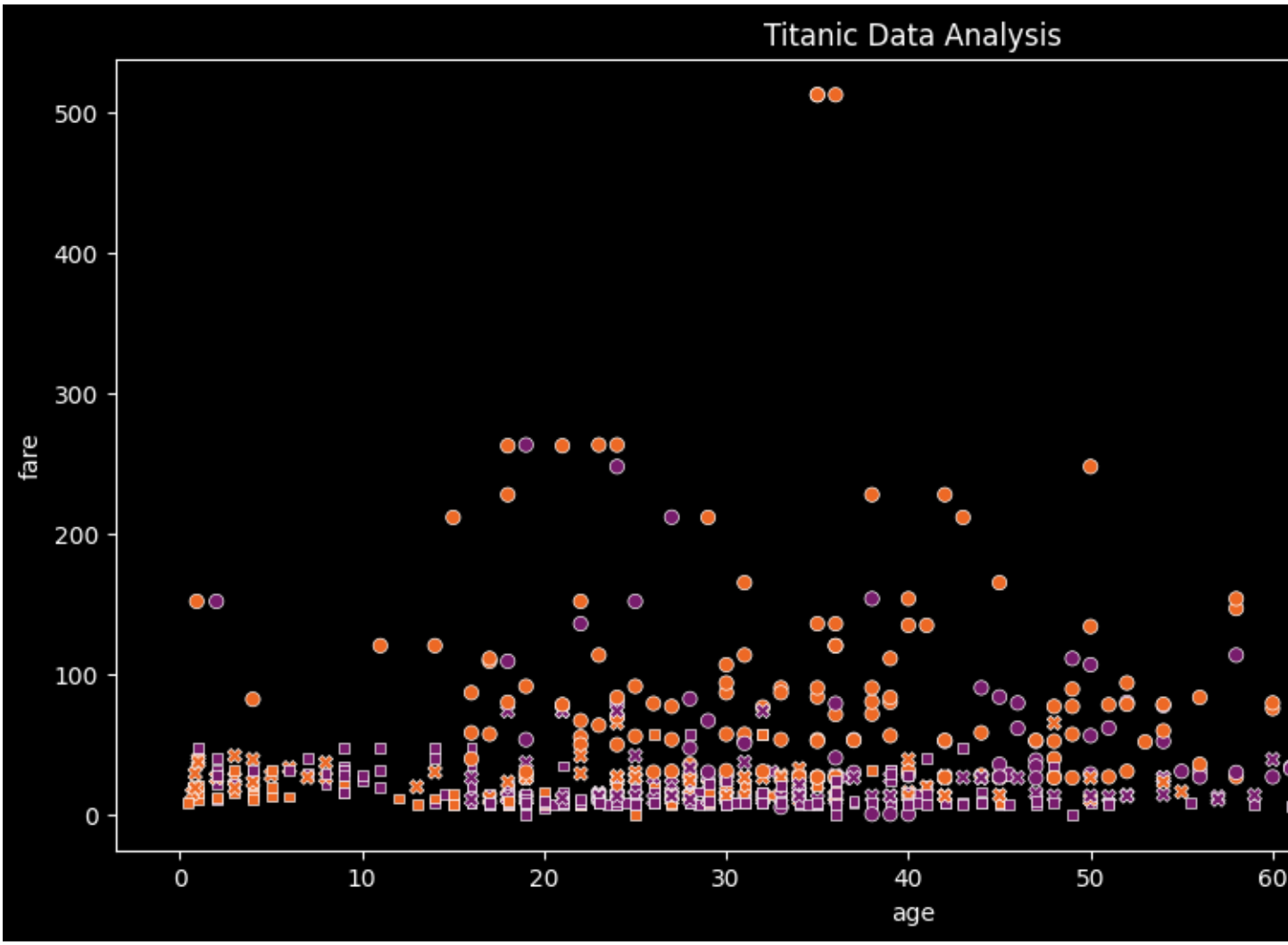


add Codeadd Markdown

```
plt.figure(figsize = (12,6))
sns.scatterplot(x = 'age', y = 'fare', data =titanic_df, hue = 'alive', style = 'class', palette = 'inferno')
plt.title('Titanic Data Analysis')
```

[70]:

```
Text(0.5, 1.0, 'Titanic Data Analysis')
```

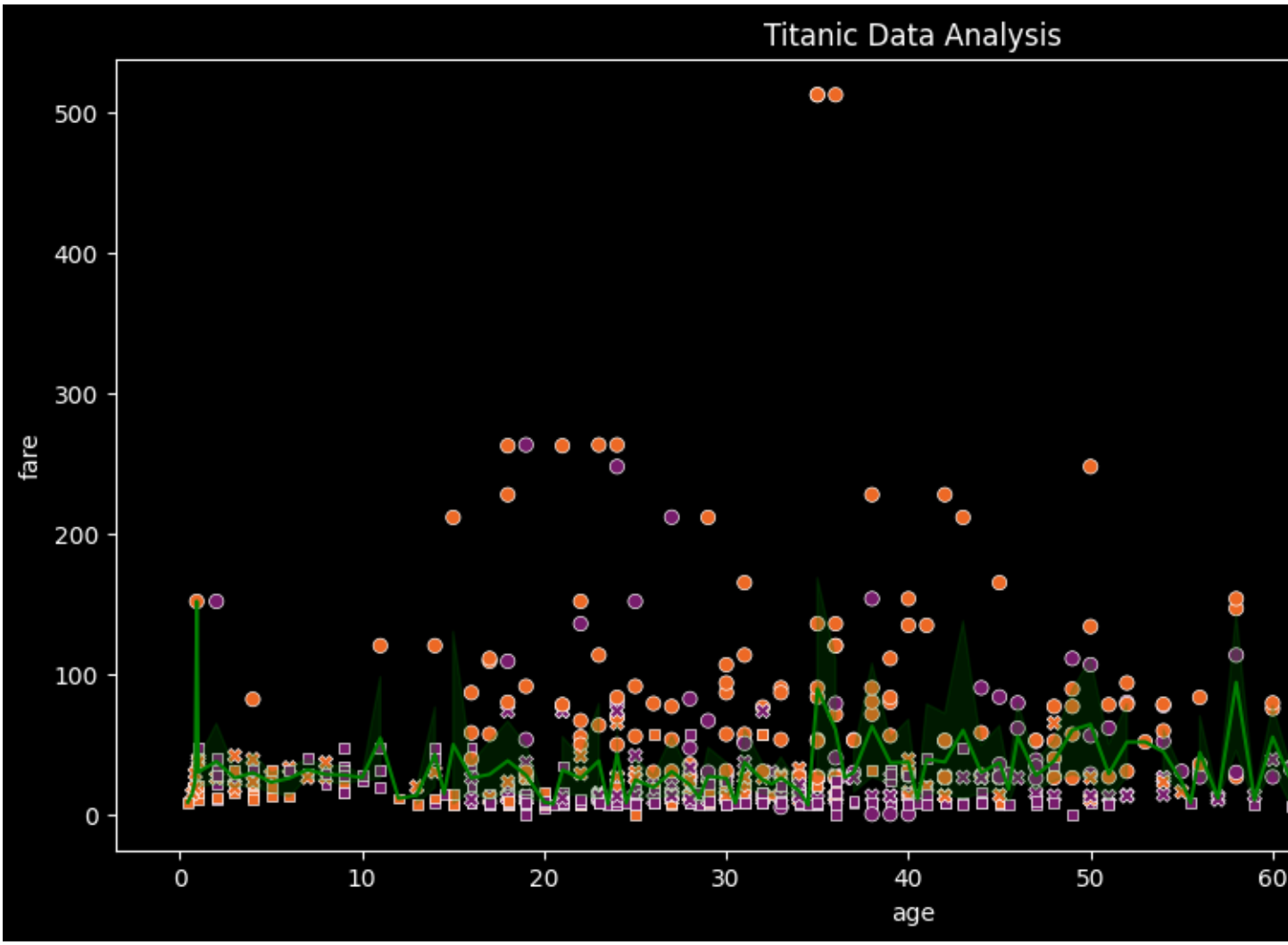


add Codeadd Markdown

```
plt.figure(figsize = (12,6))
sns.scatterplot(x = 'age', y = 'fare', data =titanic_df, hue = 'alive', style = 'class', palette = 'inferno')
sns.lineplot(x = 'age', y = 'fare',data = titanic_df, color = 'green')
plt.title('Titanic Data Analysis')
```

[71]:

```
Text(0.5, 1.0, 'Titanic Data Analysis')
```



add Codeadd Markdown

#Bar plot****

add Codeadd Markdown

titanic_df.head()

[72]:

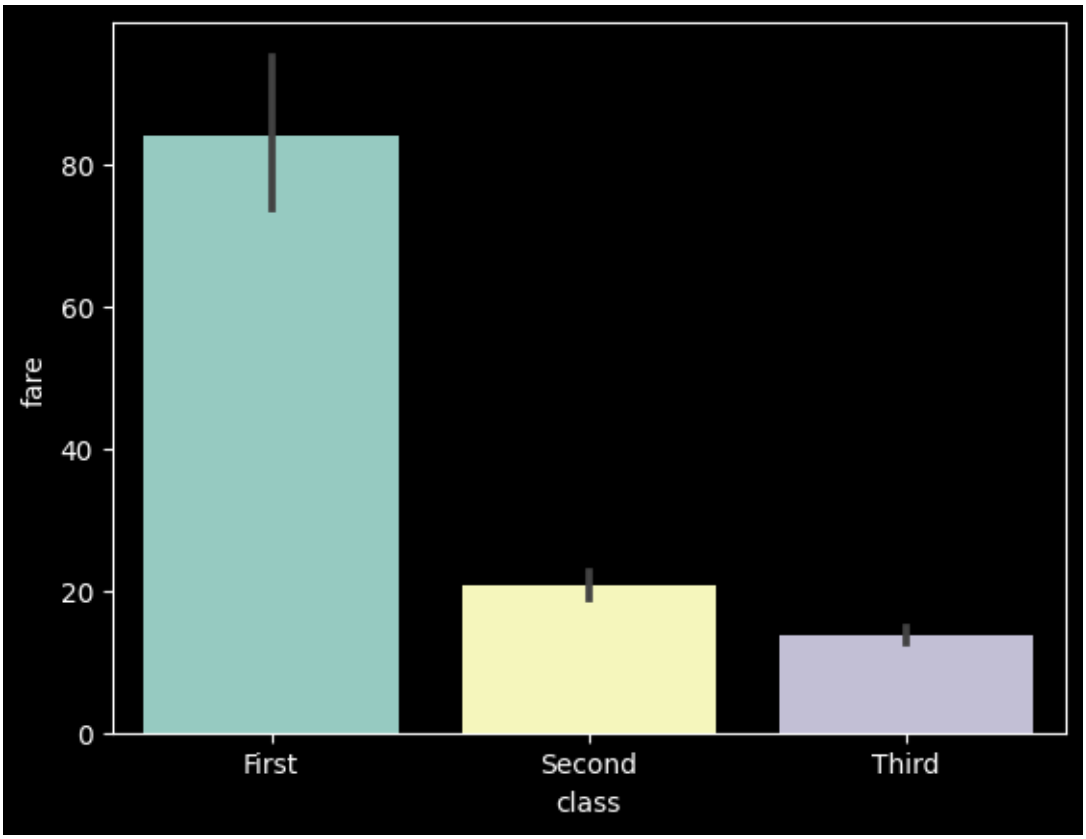
	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	embark_town	alive	alone
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN	Southampton	no	False
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	C	Cherbourg	yes	False
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN	Southampton	yes	True
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C	Southampton	yes	False
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	Southampton	no	True

add Codeadd Markdown

sns.barplot(x = 'class', y = 'fare', data =titanic_df)

[73]:

<AxesSubplot: xlabel='class', ylabel='fare'>

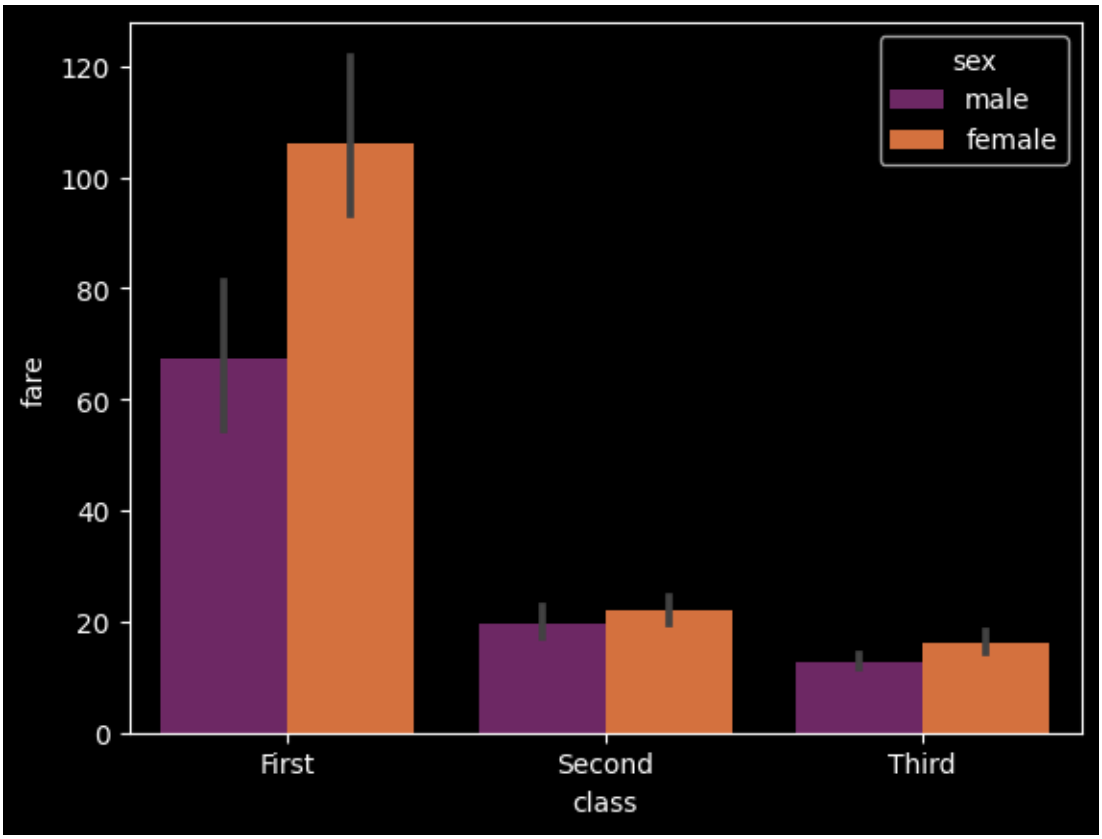


add Codeadd Markdown

sns.barplot(x = 'class', y = 'fare', data =titanic_df, hue = 'sex', palette = 'inferno')

[80]:

<AxesSubplot: xlabel='class', ylabel='fare'>

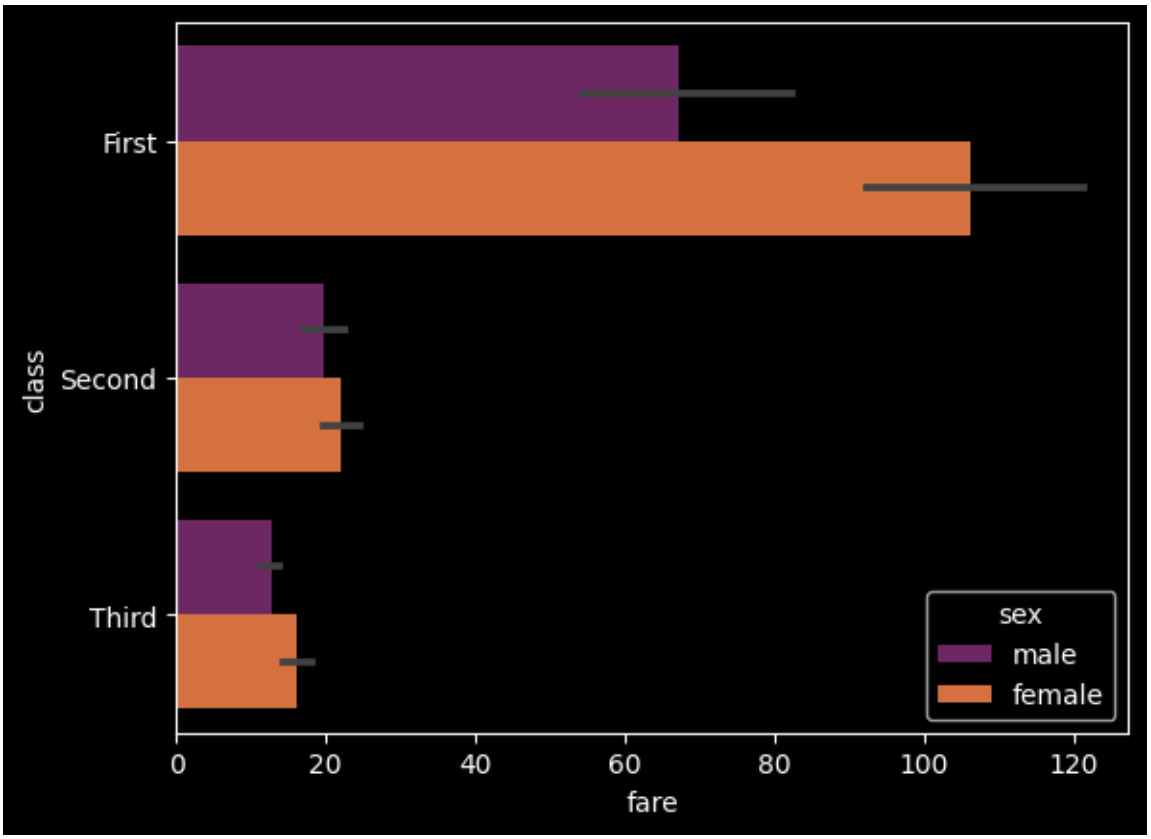


add Codeadd Markdown

sns.barplot(y = 'class', x = 'fare', data =titanic_df, hue = 'sex', palette = 'inferno', orient = 'h')

[82]:

<AxesSubplot: xlabel='fare', ylabel='class'>

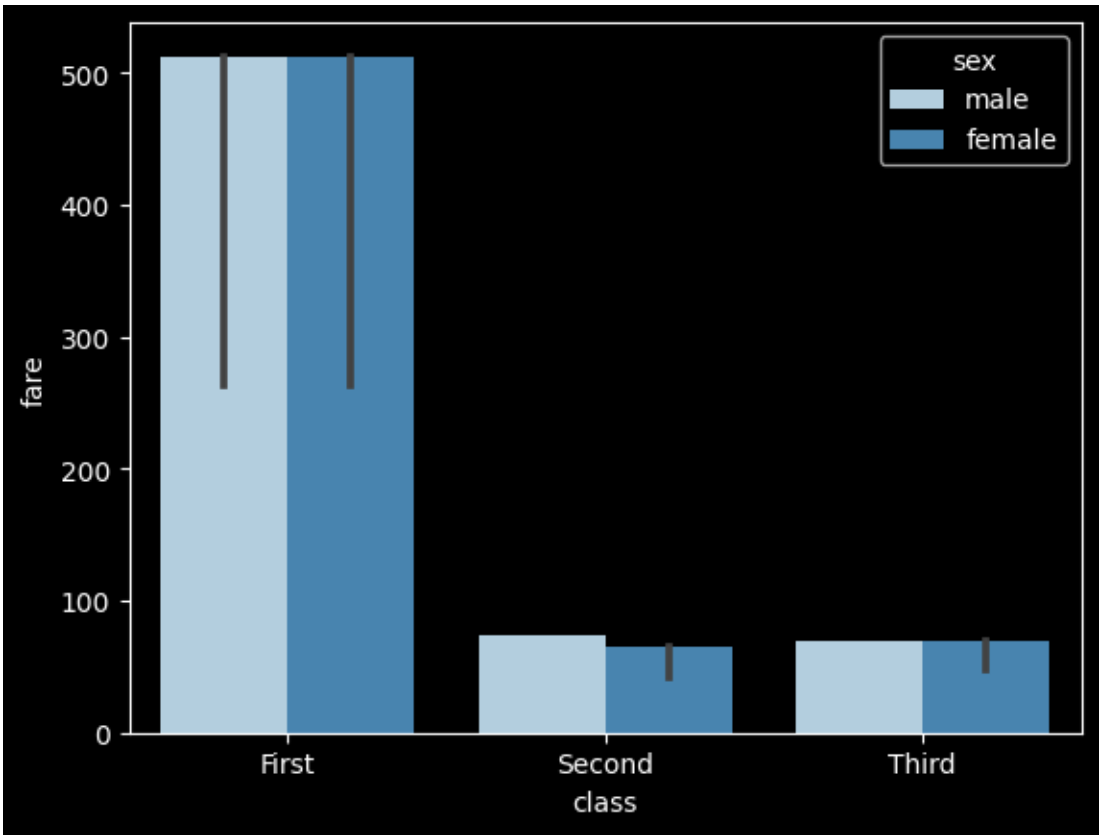


add Codeadd Markdown

sns.barplot(x = 'class', y = 'fare', data =titanic_df, hue = 'sex', palette = 'Blues', estimator = np.max)

[84]:

<AxesSubplot: xlabel='class', ylabel='fare'>



add Codeadd Markdown

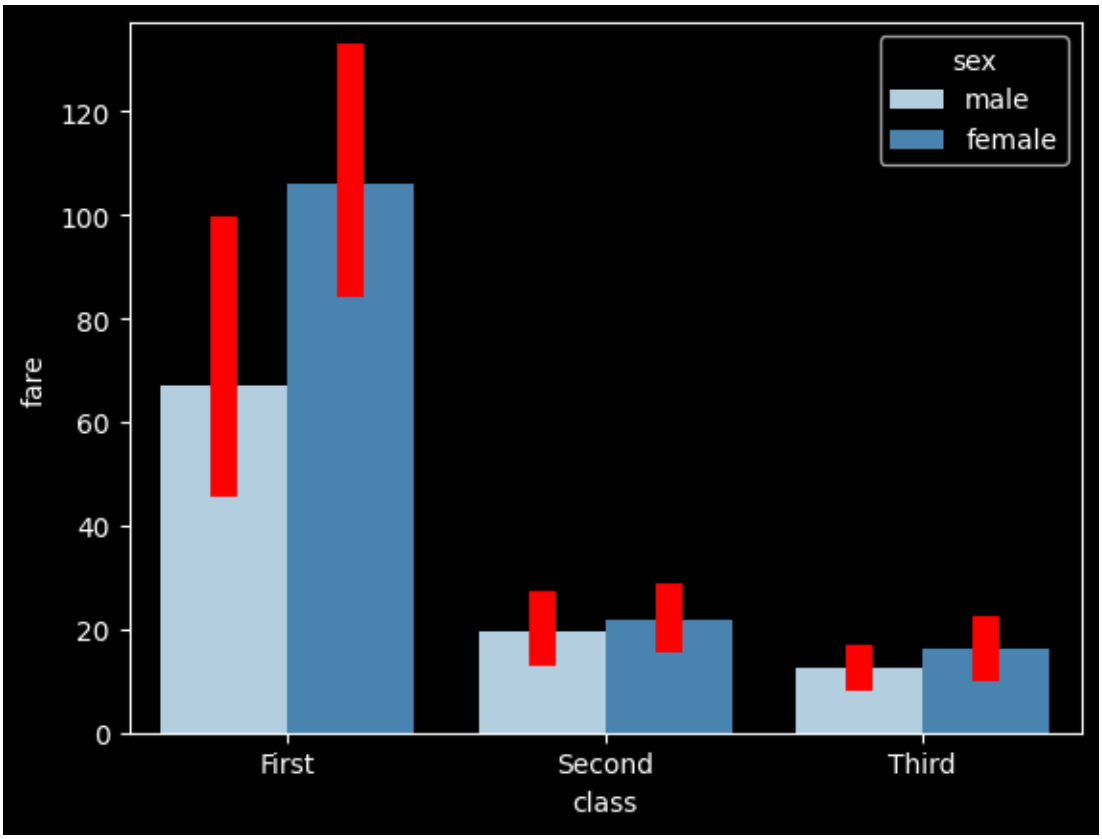
sns.barplot(x = 'class', y = 'fare', data =titanic_df, hue = 'sex', palette = 'Blues', ci = 100, errcolor = 'red', errwidth = 10)
/tmp/ipykernel_34/179625240.py:1: FutureWarning:

The `ci` parameter is deprecated. Use `errorbar=('ci', 100)` for the same effect.

sns.barplot(x = 'class', y = 'fare', data =titanic_df, hue = 'sex', palette = 'Blues', ci = 100, errcolor = 'red', errwidth = 10)

[92]:

<AxesSubplot: xlabel='class', ylabel='fare'>

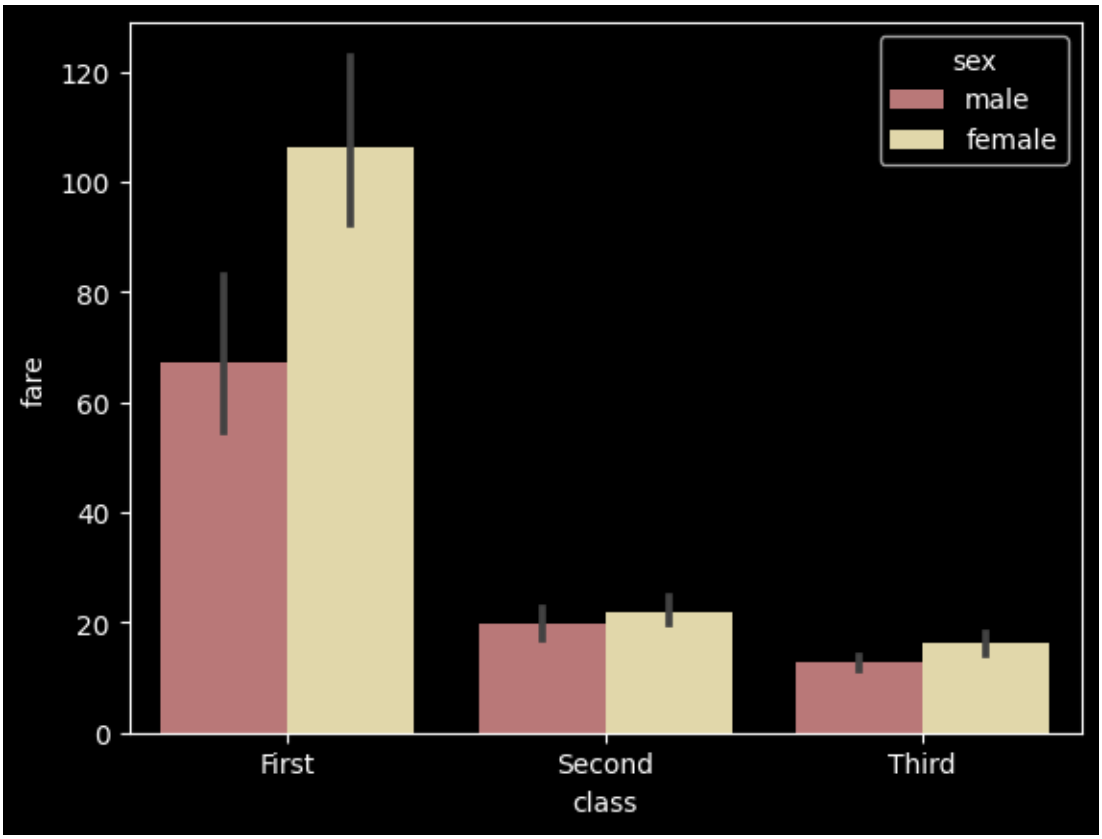


add Codeadd Markdown

sns.barplot(x = 'class', y = 'fare', data =titanic_df, hue = 'sex', palette = 'pink', saturation = 1)

[100]:

<AxesSubplot: xlabel='class', ylabel='fare'>



add Codeadd Markdown

#Heatmaps****

add Codeadd Markdown

```
flight_df = sns.load_dataset('flights')
flight_df.head()
```

[101]:

	year	month	passengers
0	1949	Jan	112
1	1949	Feb	118
2	1949	Mar	132

	year	month	passengers
3	1949	Apr	129
4	1949	May	121

add Codeadd Markdown

```
flight_df = flight_df.pivot("month", "year", "passengers")
flight_df.head()
```

```
/tmp/ipykernel_34/1106214860.py:1: FutureWarning: In a future version of pandas all arguments of DataFr
ame.pivot will be keyword-only.
  flight_df = flight_df.pivot("month", "year", "passengers")
```

[103]:

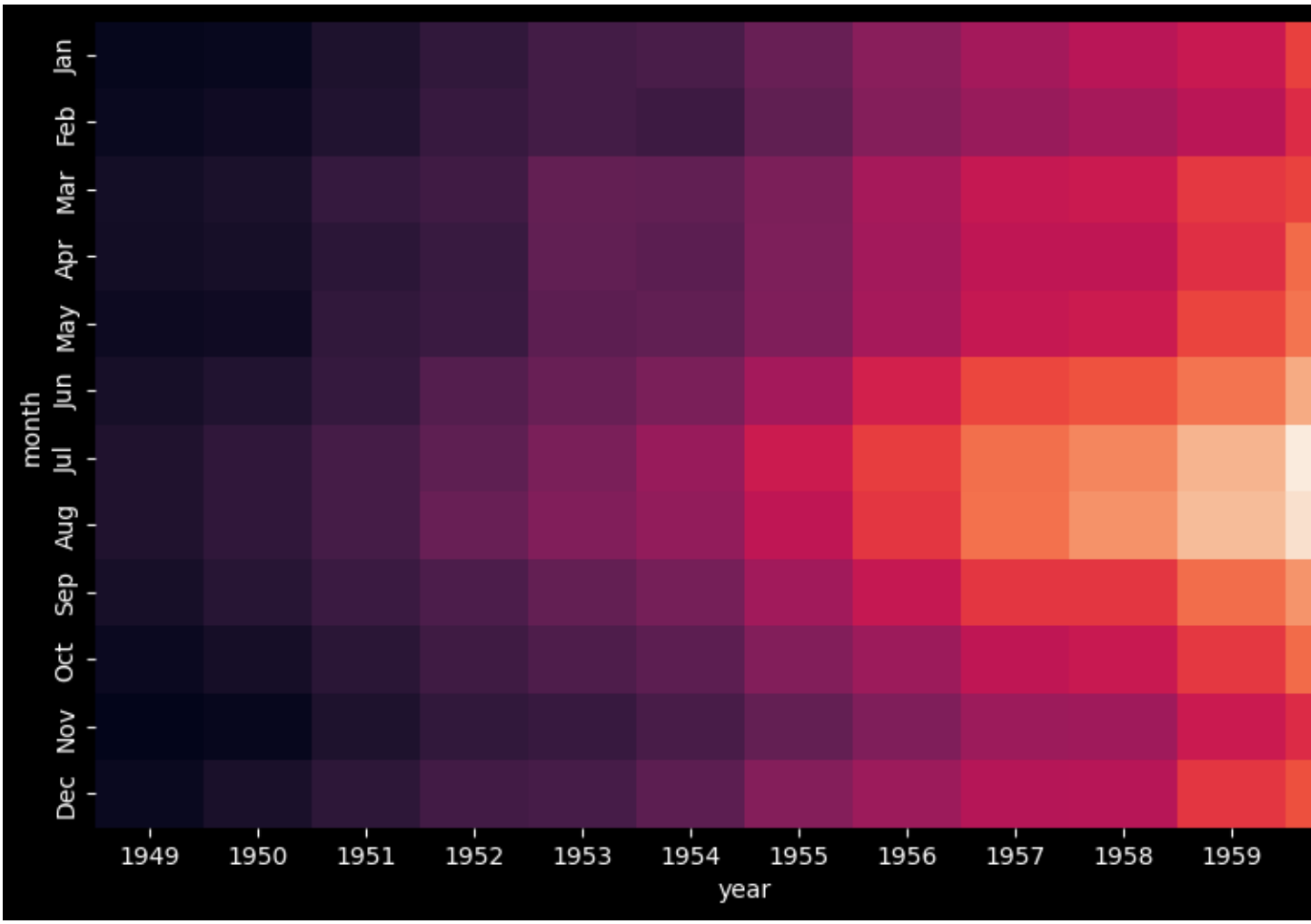
year	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
month												
Jan	112	115	145	171	196	204	242	284	315	340	360	417
Feb	118	126	150	180	196	188	233	277	301	318	342	391
Mar	132	141	178	193	236	235	267	317	356	362	406	419
Apr	129	135	163	181	235	227	269	313	348	348	396	461
May	121	125	172	183	229	234	270	318	355	363	420	472

add Codeadd Markdown

```
plt.figure(figsize = (12,6))
ax = sns.heatmap(flight_df)
ax
```

[106]:

```
<AxesSubplot: xlabel='year', ylabel='month'>
```

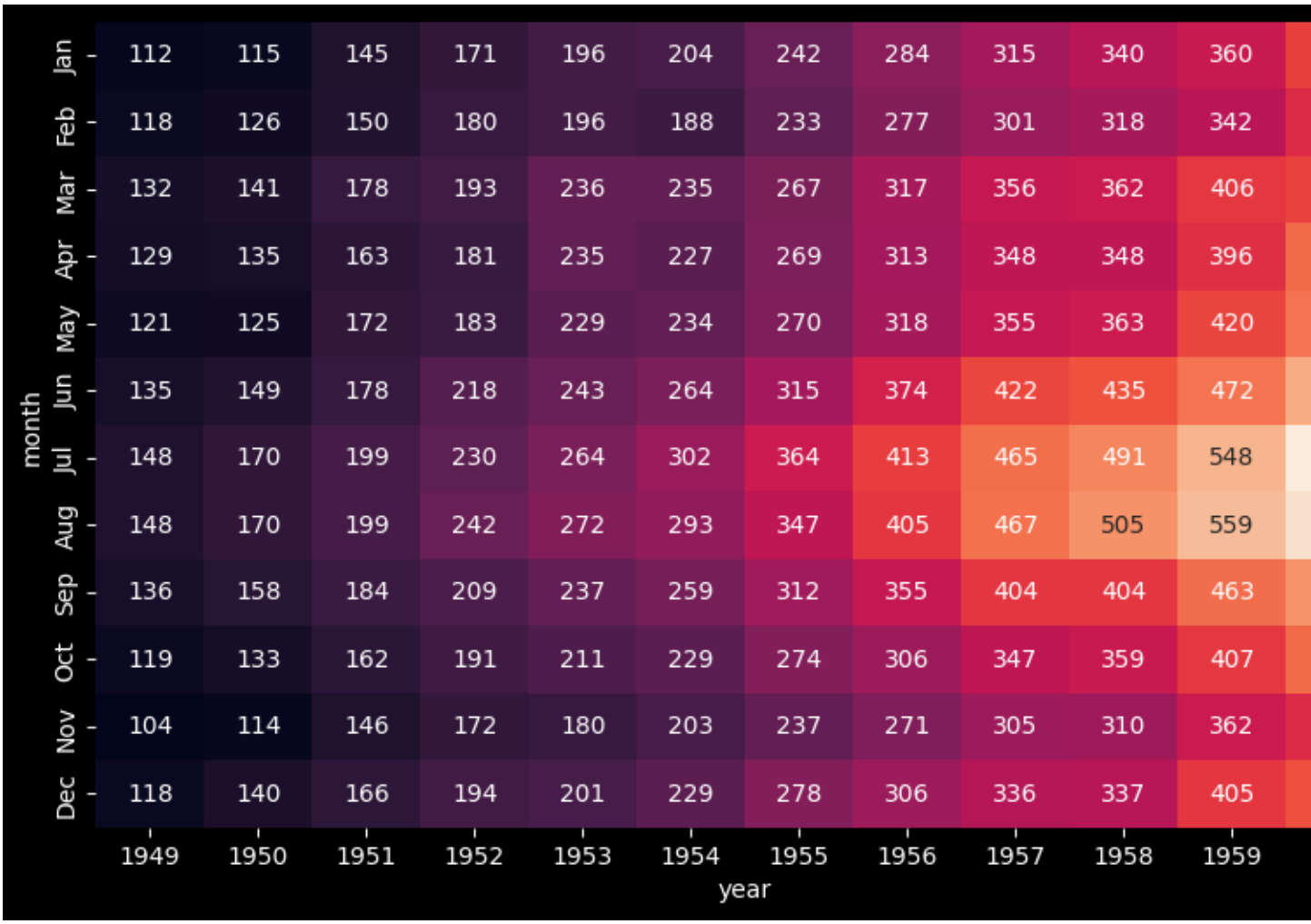


add Codeadd Markdown

```
plt.figure(figsize = (12,6))
ax = sns.heatmap(flight_df, annot = True, fmt = 'd')
ax
```

[107]:

```
<AxesSubplot: xlabel='year', ylabel='month'>
```

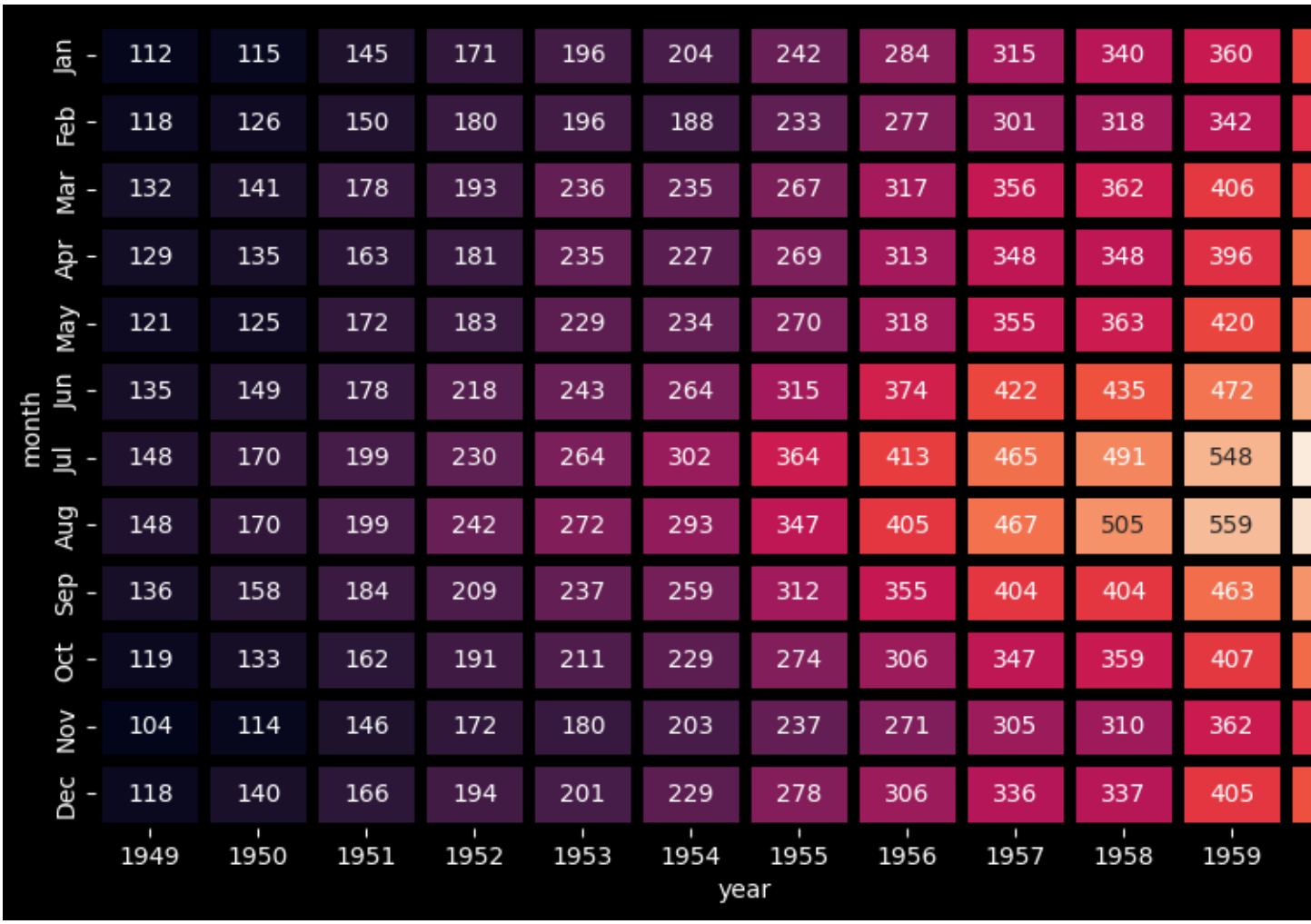


add Codeadd Markdown

```
plt.figure(figsize = (12,6))
ax = sns.heatmap(flight_df, annot = True, fmt = 'd', linecolor = 'k', linewidths = '5')
ax
```

[108]:

```
<AxesSubplot: xlabel='year', ylabel='month'>
```

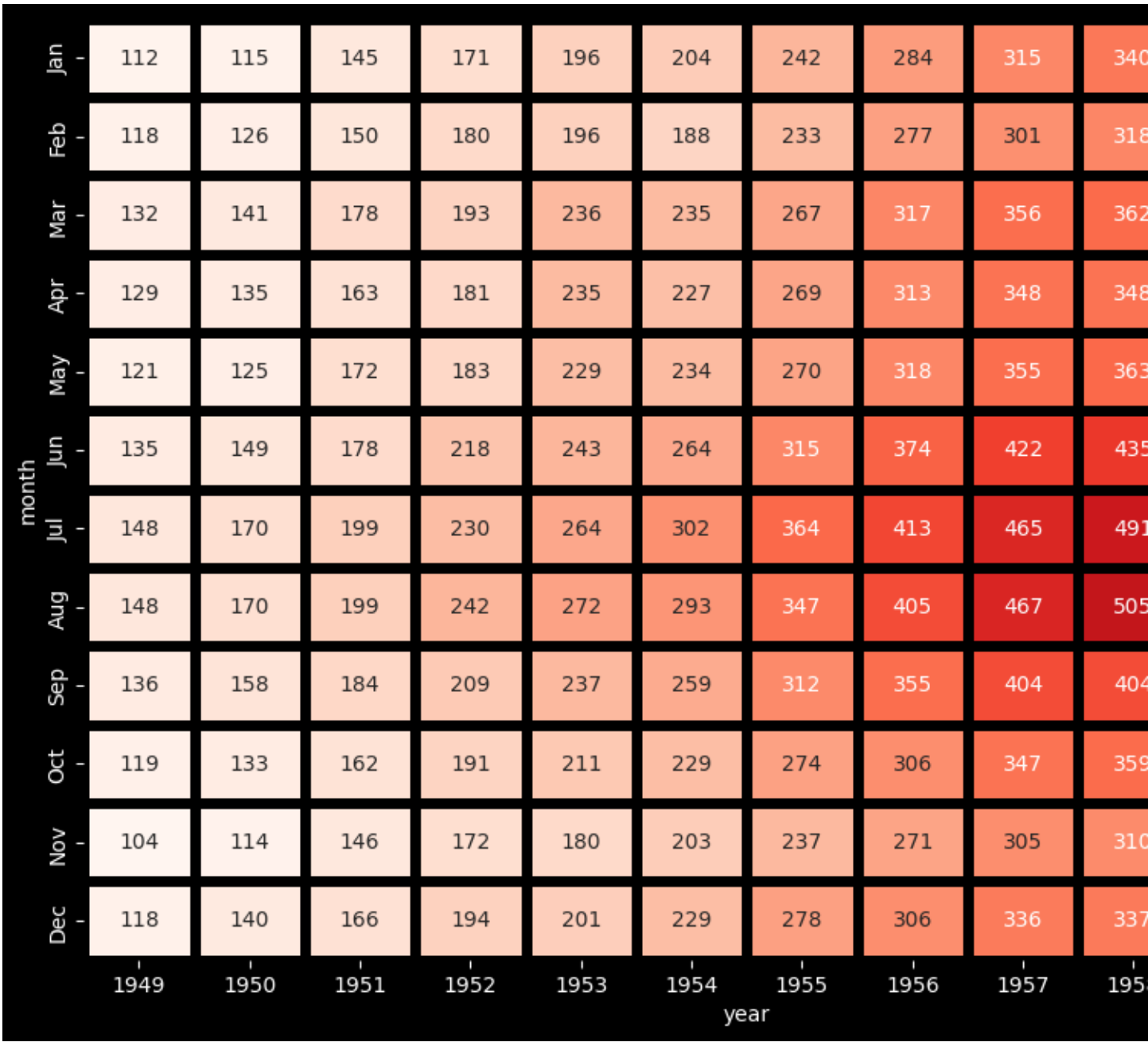


add Codeadd Markdown

```
plt.figure(figsize = (14,8))
ax = sns.heatmap(flight_df, annot = True, fmt = 'd', linecolor = 'k', linewidths = '5', cmap = 'Reds')
ax
```

[109]:

```
<AxesSubplot: xlabel='year', ylabel='month'>
```

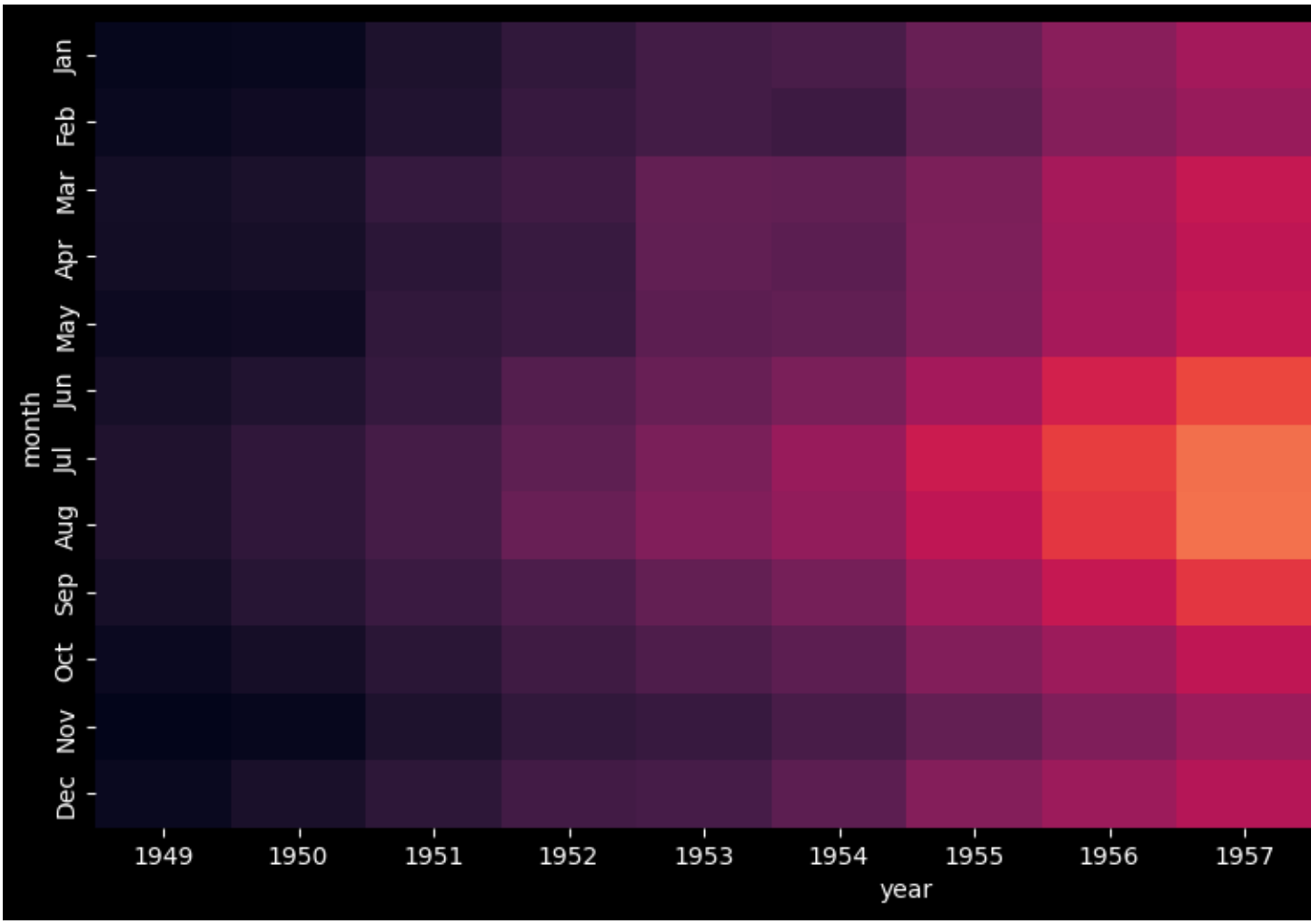


add Codeadd Markdown

```
plt.figure(figsize = (12,6))
sns.heatmap(flight_df, cbar = False)
```

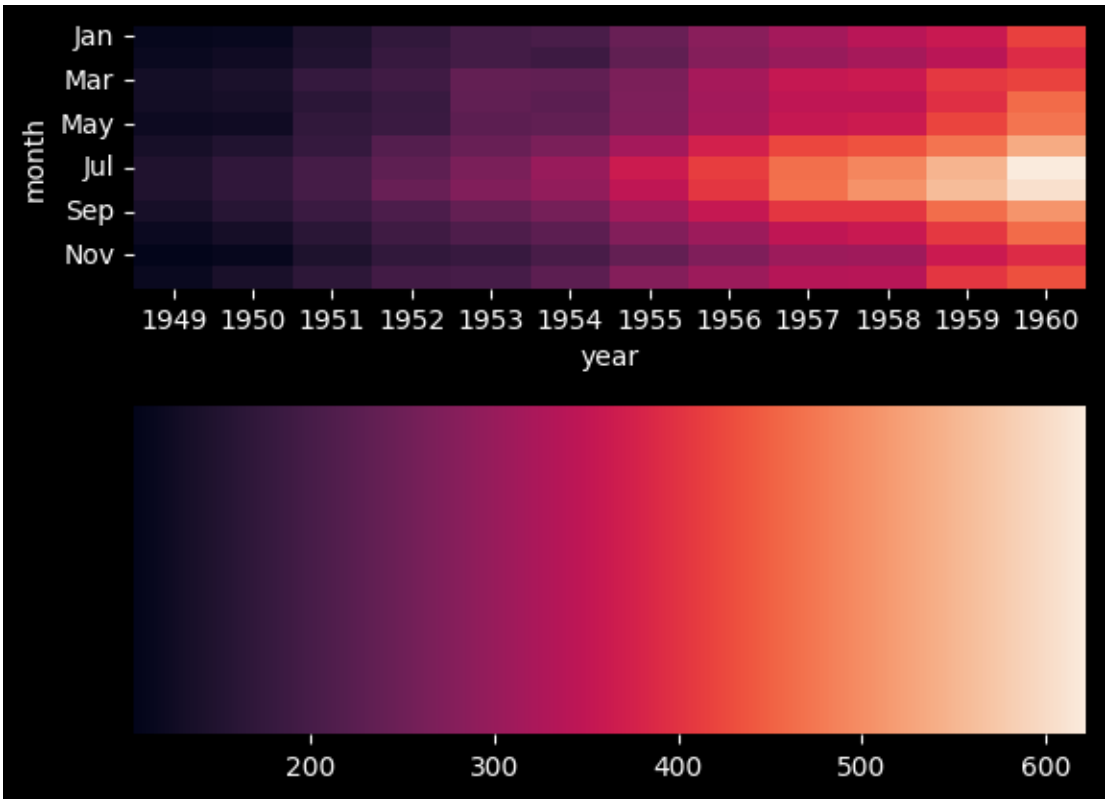
[112]:

```
<AxesSubplot: xlabel='year', ylabel='month'>
```



add Codeadd Markdown

```
grid_kws = {"height_ratios": (.4, .5), "hspace": .4}
f, (ax, cbar_ax) = plt.subplots(2, gridspec_kw = grid_kws)
ax = sns.heatmap(flight_df, cbar_kws = {"orientation": "horizontal"}, ax=ax, cbar_ax = cbar_ax,)
```



add Codeadd Markdown

titanic_df.corr()

/tmp/ipykernel_34/3484993026.py:1: 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.

titanic_df.corr()

[124]:

	survived	pclass	age	sibsp	parch	fare	adult_male	alone
survived	1.000000	-0.338481	-0.077221	-0.035322	0.081629	0.257307	-0.557080	-0.203367
pclass	-0.338481	1.000000	-0.369226	0.083081	0.018443	-0.549500	0.094035	0.135207
age	-0.077221	-0.369226	1.000000	-0.308247	-0.189119	0.096067	0.280328	0.198270
sibsp	-0.035322	0.083081	-0.308247	1.000000	0.414838	0.159651	-0.253586	-0.584471

	survived	pclass	age	sibsp	parch	fare	adult_male	alone
parch	0.081629	0.018443	-0.189119	0.414838	1.000000	0.216225	-0.349943	-0.583398
fare	0.257307	-0.549500	0.096067	0.159651	0.216225	1.000000	-0.182024	-0.271832
adult_male	-0.557080	0.094035	0.280328	-0.253586	-0.349943	-0.182024	1.000000	0.404744
alone	-0.203367	0.135207	0.198270	-0.584471	-0.583398	-0.271832	0.404744	1.000000

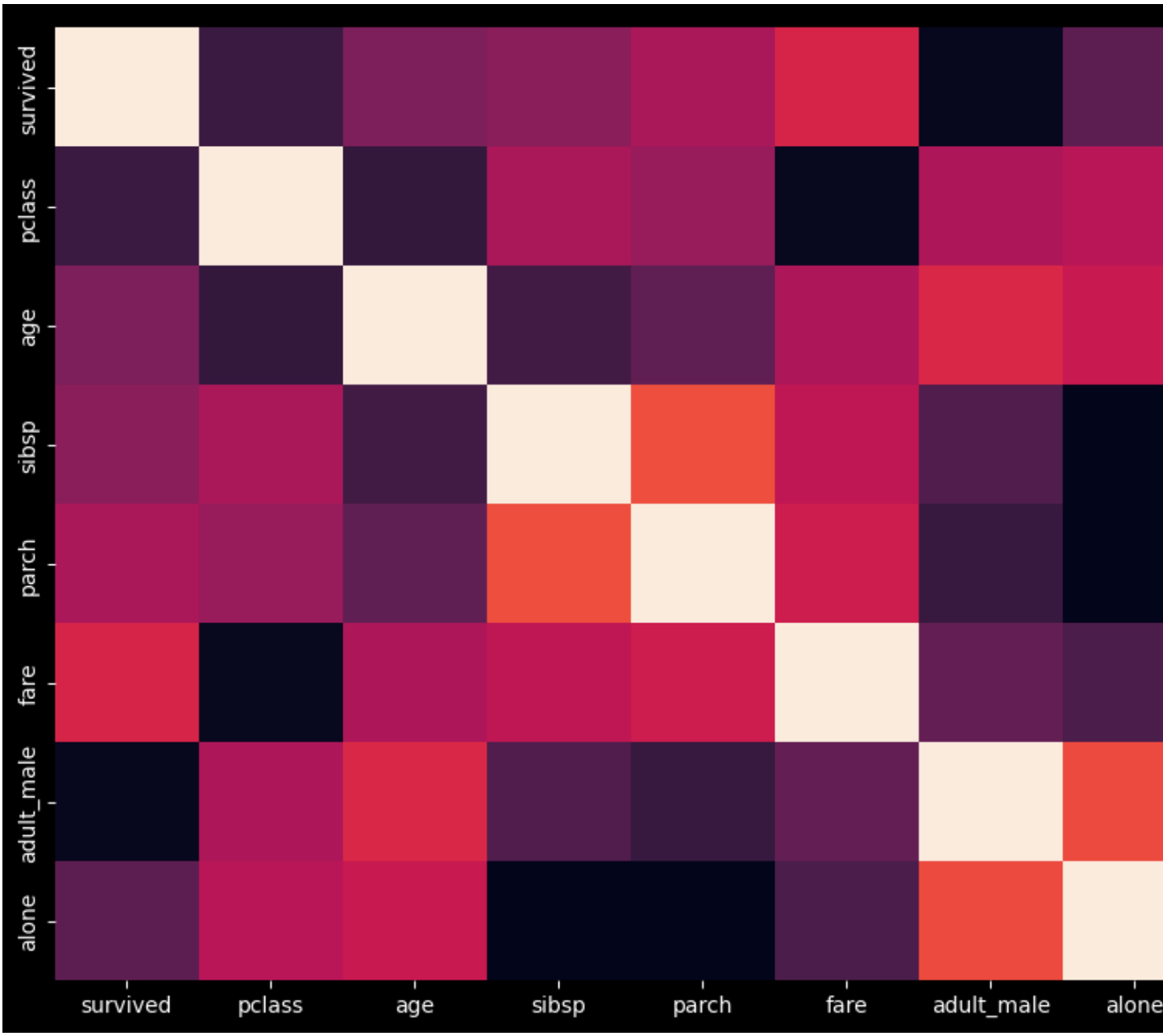
add Codeadd Markdown

```
titanic_df = sns.load_dataset('titanic')
plt.figure(figsize = (12,8))
sns.heatmap(titanic_df.corr())
```

```
/tmp/ipykernel_34/2825033291.py:3: 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 num
eric_only to silence this warning.
  sns.heatmap(titanic_df.corr())
```

[125]:

<AxesSubplot: >



add Codeadd Markdown

#Pair plot****

add Codeadd Markdown

penguins = sns.load_dataset('penguins')

penguins.head()

[127]:

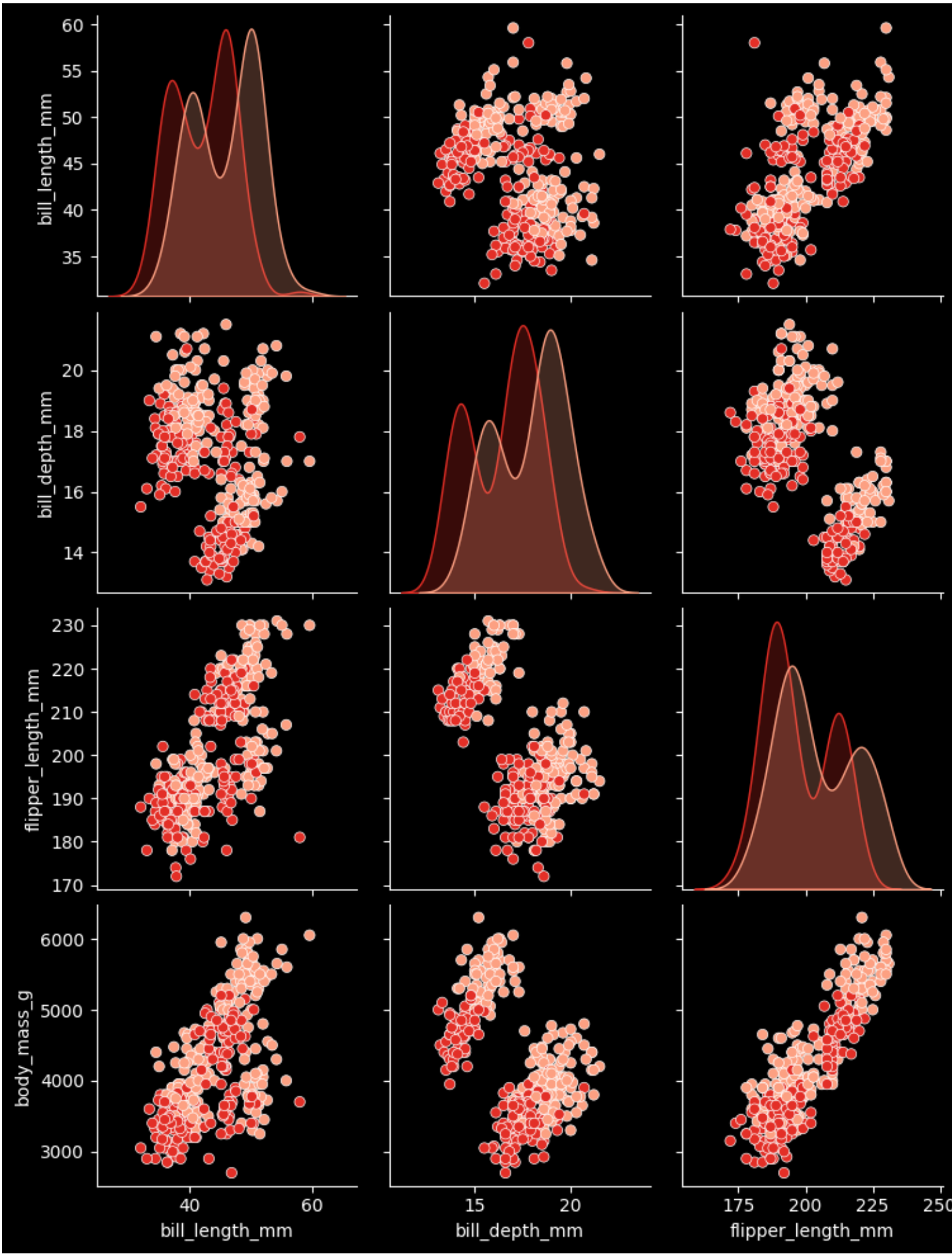
	species	island	bill_length_mm	bill_depth_mm	flipper_length_mm	body_mass_g	sex
0	Adelie	Torgersen	39.1	18.7	181.0	3750.0	Male
1	Adelie	Torgersen	39.5	17.4	186.0	3800.0	Female
2	Adelie	Torgersen	40.3	18.0	195.0	3250.0	Female
3	Adelie	Torgersen	NaN	NaN	NaN	NaN	NaN
4	Adelie	Torgersen	36.7	19.3	193.0	3450.0	Female

add Codeadd Markdown

```
plt.figure(figsize = (12,12))
sns.pairplot(penguins, hue = 'sex', palette = 'Reds')
```

[128]:

```
<seaborn.axisgrid.PairGrid at 0x7b6a99259a20>
<Figure size 1200x1200 with 0 Axes>
```

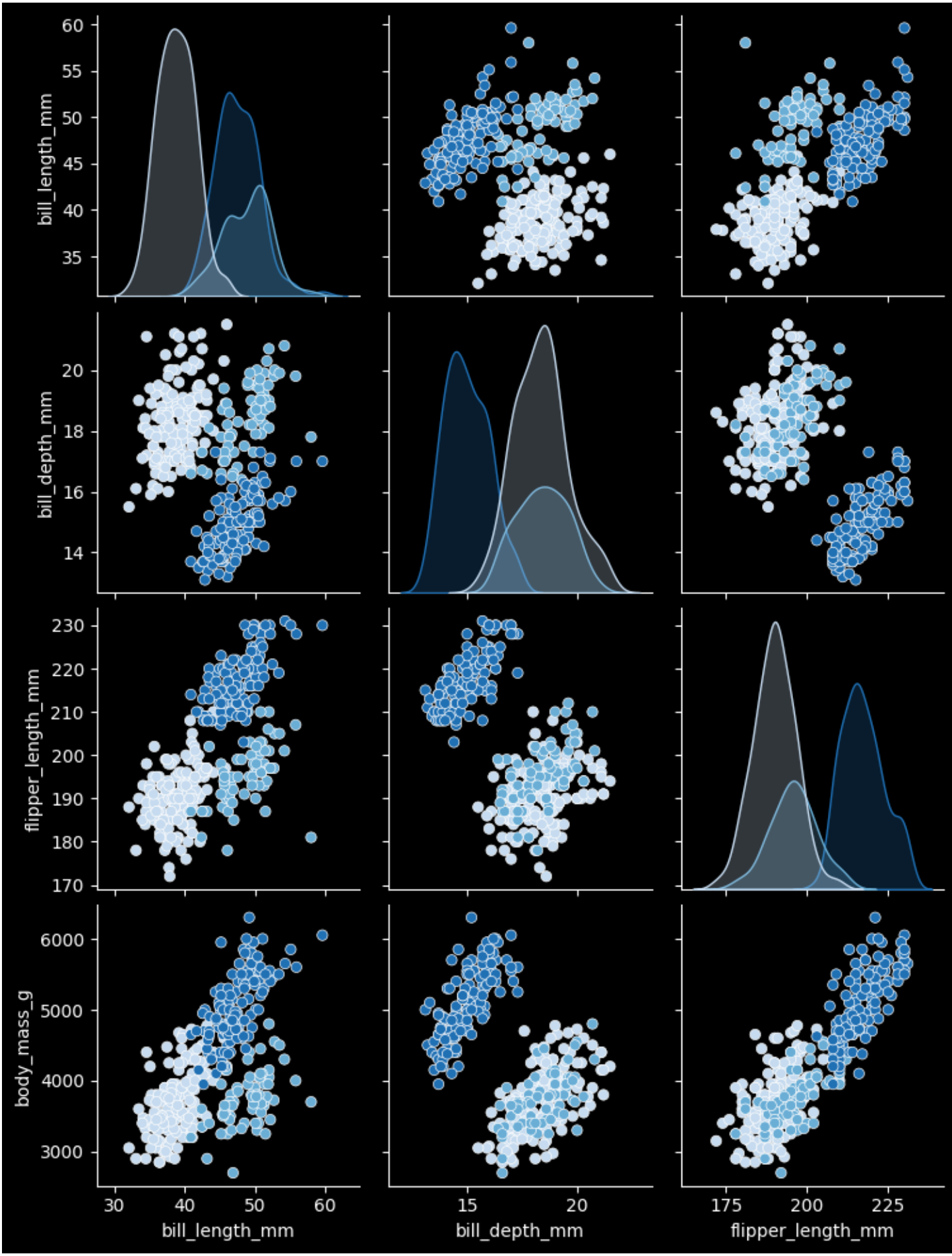

bill_length_mm
bill_depth_mm
flipper_length_mm
body_mass_g
60
55
50
45
40
35
20
18
16
14
230
220
210
200
190
180
170
6000
5000
4000
3000
40
60
15
20
175
200
225
250

add Codeadd Markdown

```
plt.figure(figsize = (12,12))
sns.pairplot(penguins, hue = 'species', palette = 'Blues')
```

[129]:

```
<seaborn.axisgrid.PairGrid at 0x7b6a989c53f0>
<Figure size 1200x1200 with 0 Axes>
```

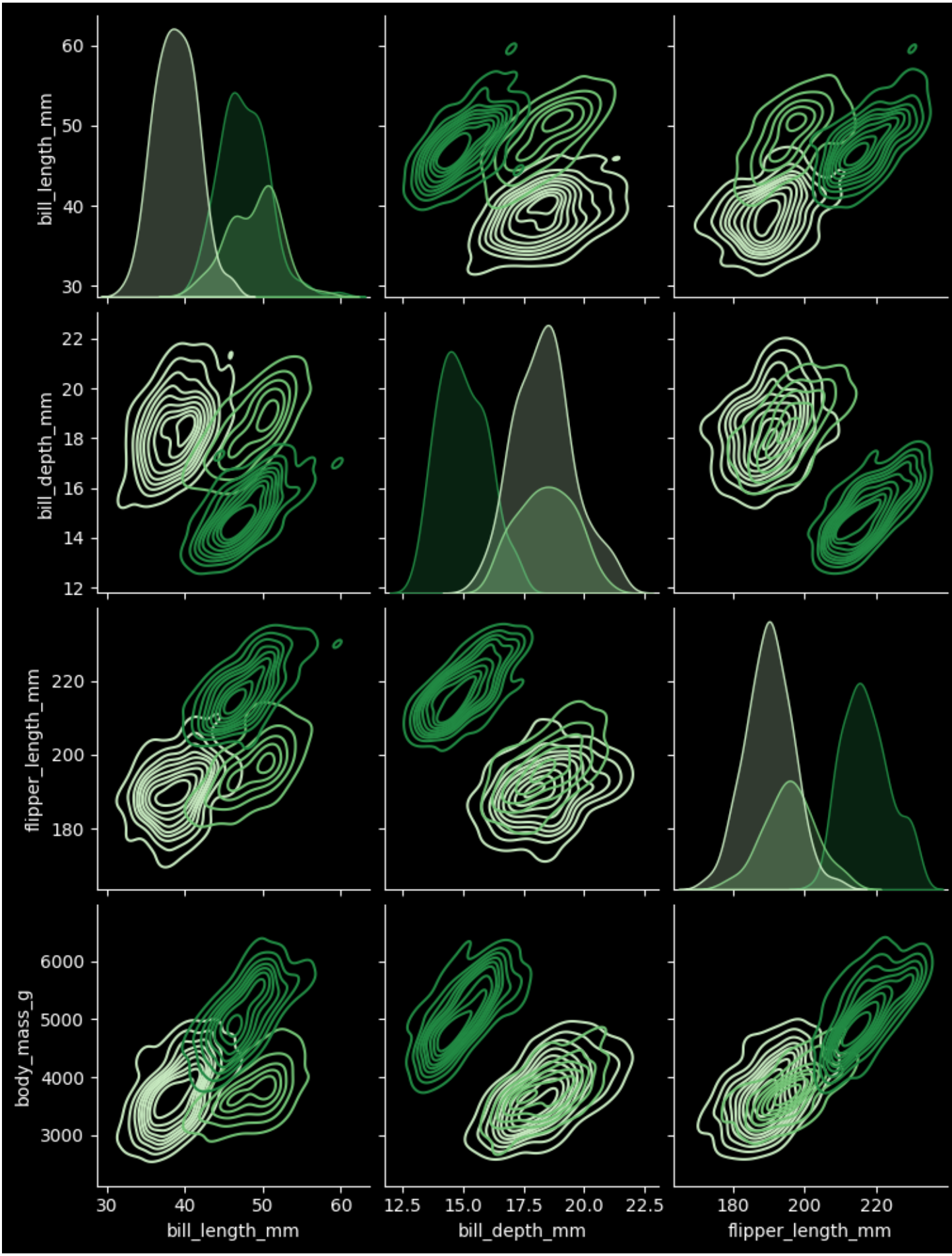

bill_length_mm
bill_depth_mm
flipper_length_mm
body_mass_g
60
55
50
45
40
35
20
18
16
14
230
220
210
200
190
180
170
6000
5000
4000
3000
30
40
50
60
15
20
175
200
225

add Codeadd Markdown

```
plt.figure(figsize = (12,12))
sns.pairplot(penguins, hue = 'species', kind = 'kde', palette = 'Greens')
```

[131]:

```
<seaborn.axisgrid.PairGrid at 0x7b6a97c5a3e0>
<Figure size 1200x1200 with 0 Axes>
```

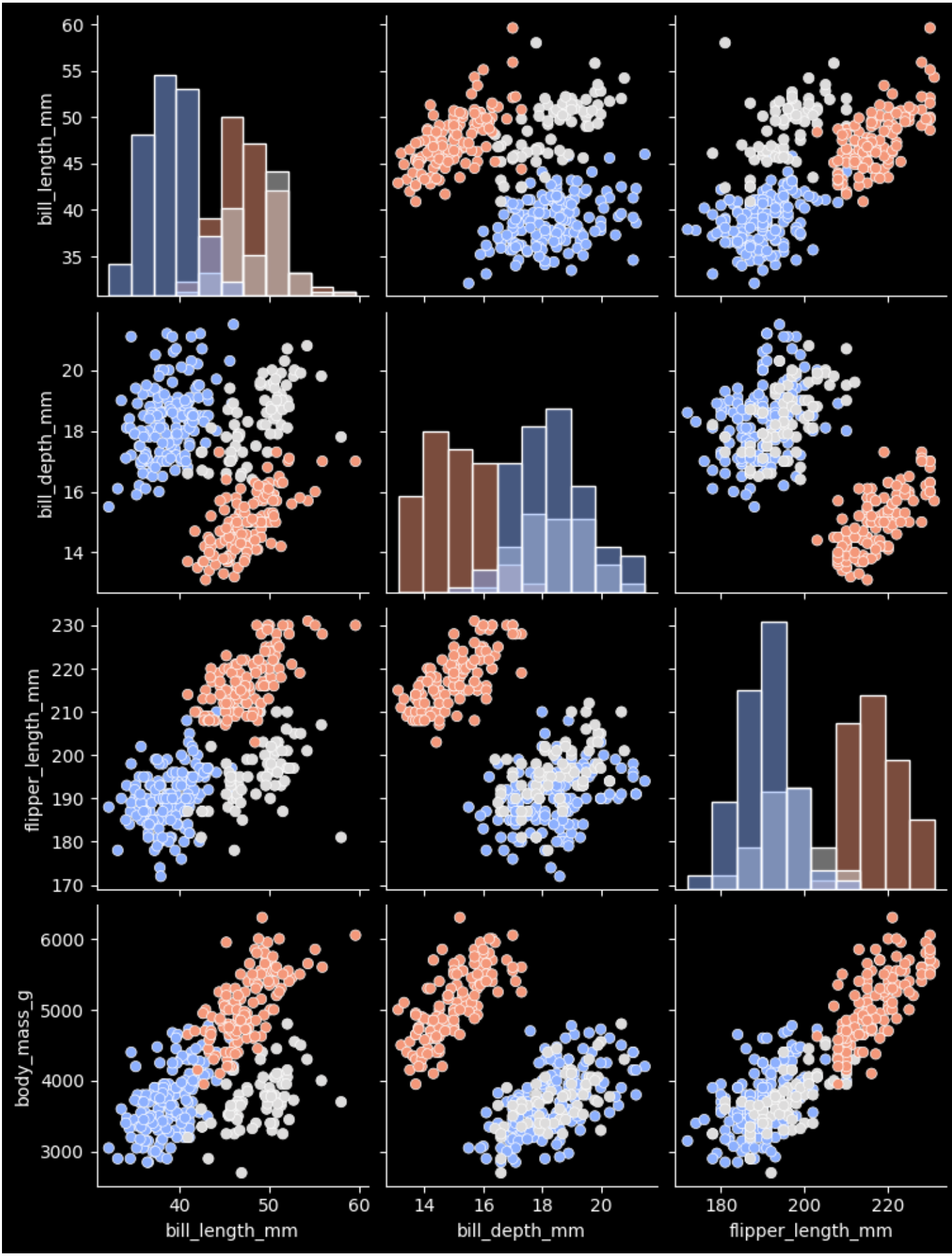

bill_length_mm
bill_depth_mm
flipper_length_mm
body_mass_g
30
40
50
60
12.5
15.0
17.5
20.0
22.5
180
200
220
3000
4000
5000
6000
12
14
16
18
20
22
180
200
220

add Codeadd Markdown

```
plt.figure(figsize = (12,12))
sns.pairplot(penguins, diag_kind = 'hist', hue = 'species', palette = 'coolwarm')
```

[135]:

```
<seaborn.axisgrid.PairGrid at 0x7b6a96a6f9d0>
<Figure size 1200x1200 with 0 Axes>
```

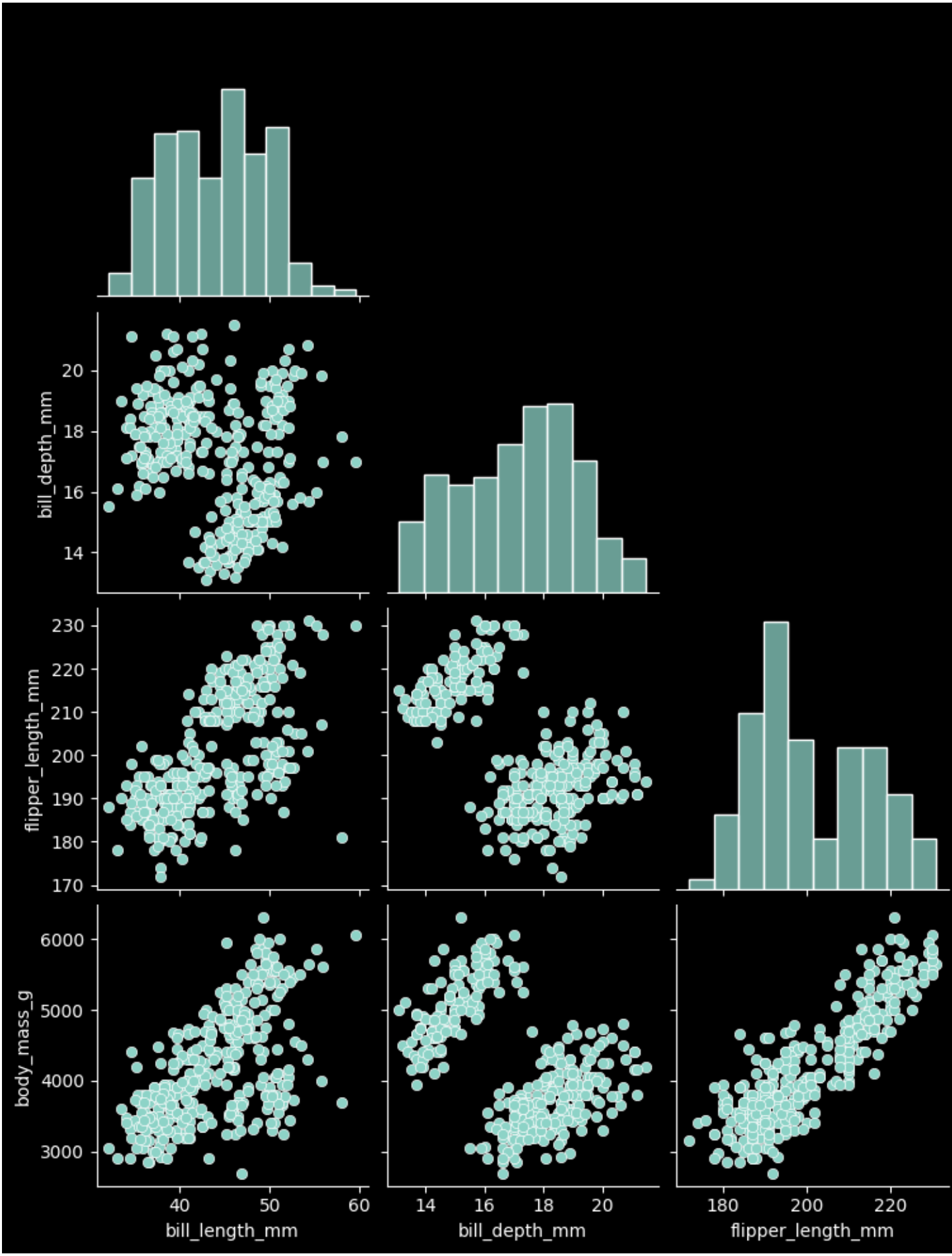

bill_length_mm
bill_depth_mm
flipper_length_mm
body_mass_g
60
55
50
45
40
35
20
18
16
14
230
220
210
200
190
180
170
6000
5000
4000
3000
40
50
60
14
16
18
20
180
200
220
bill_length_mm
bill_depth_mm
flipper_length_mm

add Codeadd Markdown

```
plt.figure(figsize = (12, 12))
sns. pairplot(penguins, corner = True)
```

[137]:

```
<seaborn.axisgrid.PairGrid at 0x7b6a9614b640>
<Figure size 1200x1200 with 0 Axes>
```

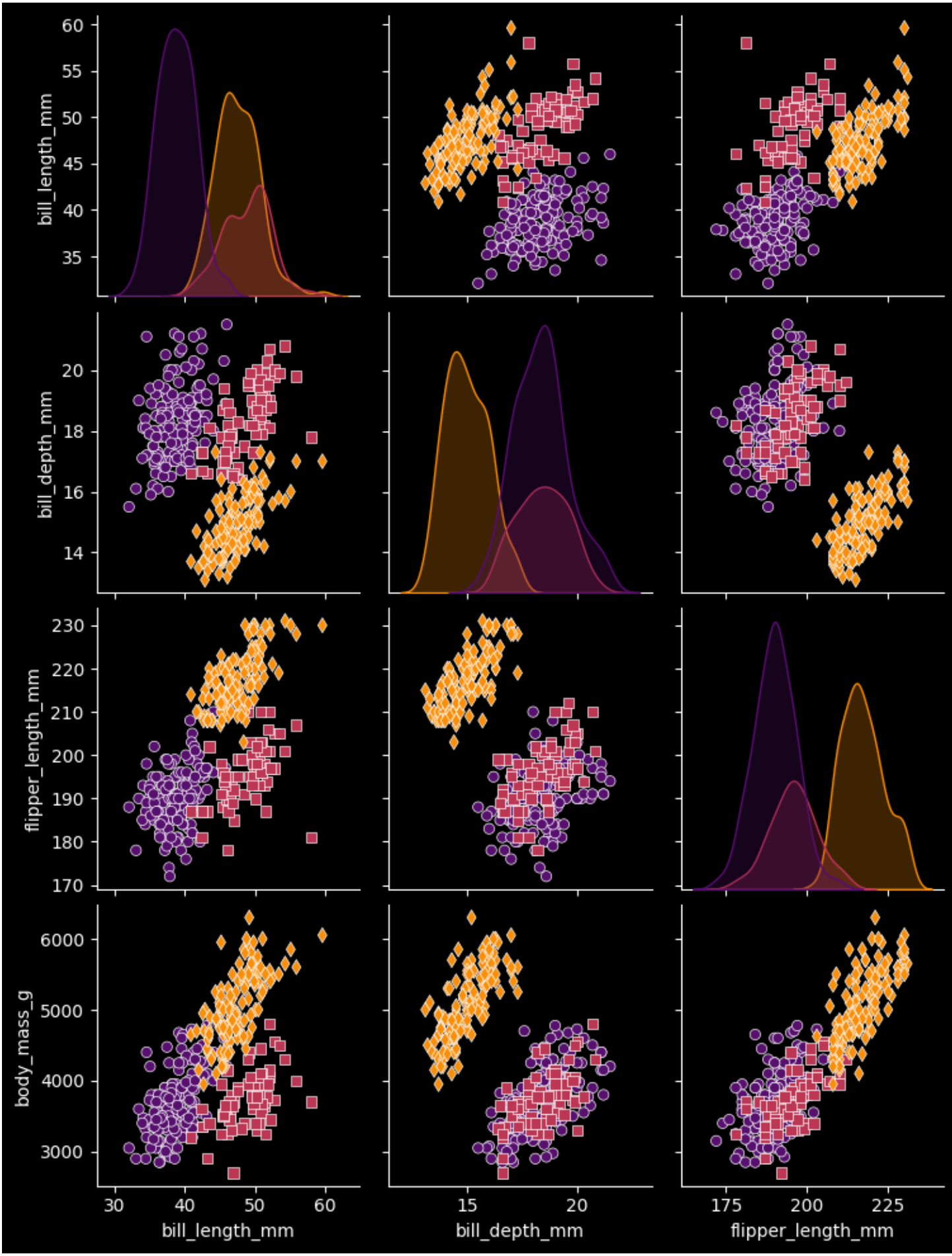

bill_depth_mm
flipper_length_mm
body_mass_g
bill_length_mm
bill_depth_mm
flipper_length_mm
20
18
16
14
230
220
210
200
190
180
170
6000
5000
4000
3000
40
50
60
14
16
18
20
180
200
220

add Codeadd Markdown

```
plt.figure(figsize = (12,12))
sns.pairplot(penguins, hue = "species", markers = ["o", "s", "d"], palette = 'inferno')
```

[141]:

```
<seaborn.axisgrid.PairGrid at 0x7b6a94293a30>
<Figure size 1200x1200 with 0 Axes>
```


bill_length_mm
bill_depth_mm
flipper_length_mm
body_mass_g
60
55
50
45
40
35
20
18
16
14
230
220
210
200
190
180
170
6000
5000
4000
3000
30
40
50
60
15
20
175
200
225

add Codeadd Markdown

add Codeadd Markdown