

# Line plots on multiple facets

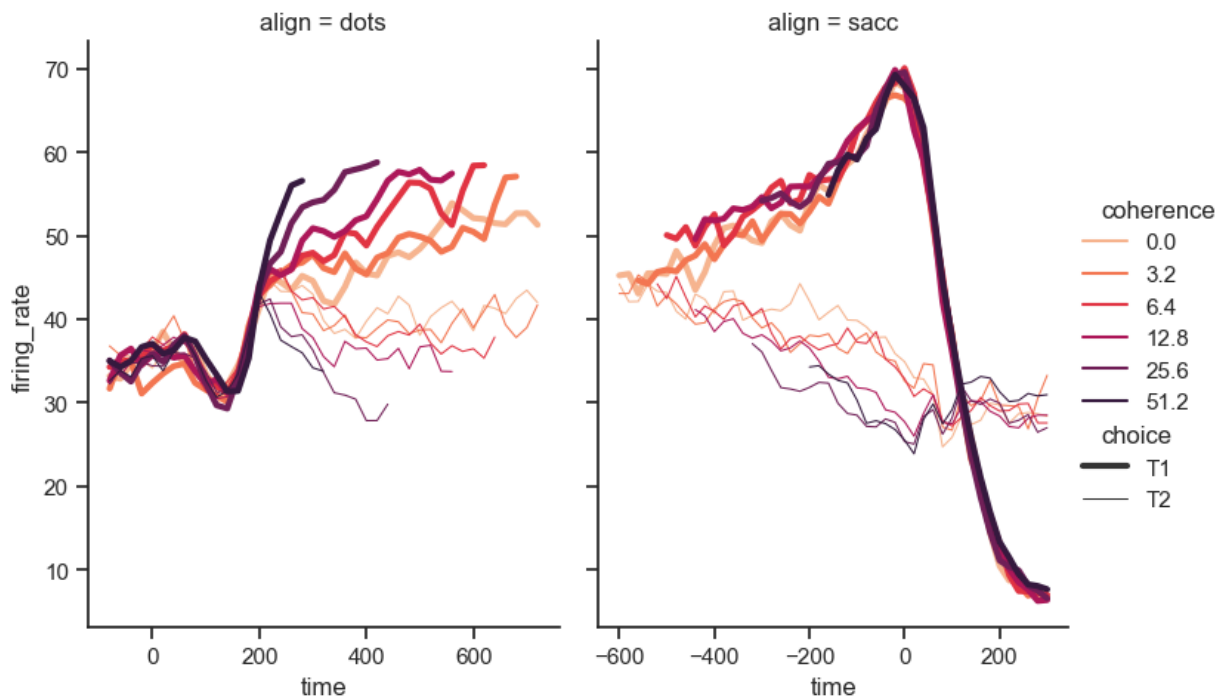
```
In [1]: import seaborn as sns
sns.set_theme(style="ticks")

dots = sns.load_dataset("dots")

# Define the palette as a list to specify exact values
palette = sns.color_palette("rocket_r")

# Plot the lines on two facets
sns.relplot(
    data=dots,
    x="time", y="firing_rate",
    hue="coherence", size="choice", col="align",
    kind="line", size_order=["T1", "T2"], palette=palette,
    height=5, aspect=.75, facet_kws=dict(sharex=False),
)
```

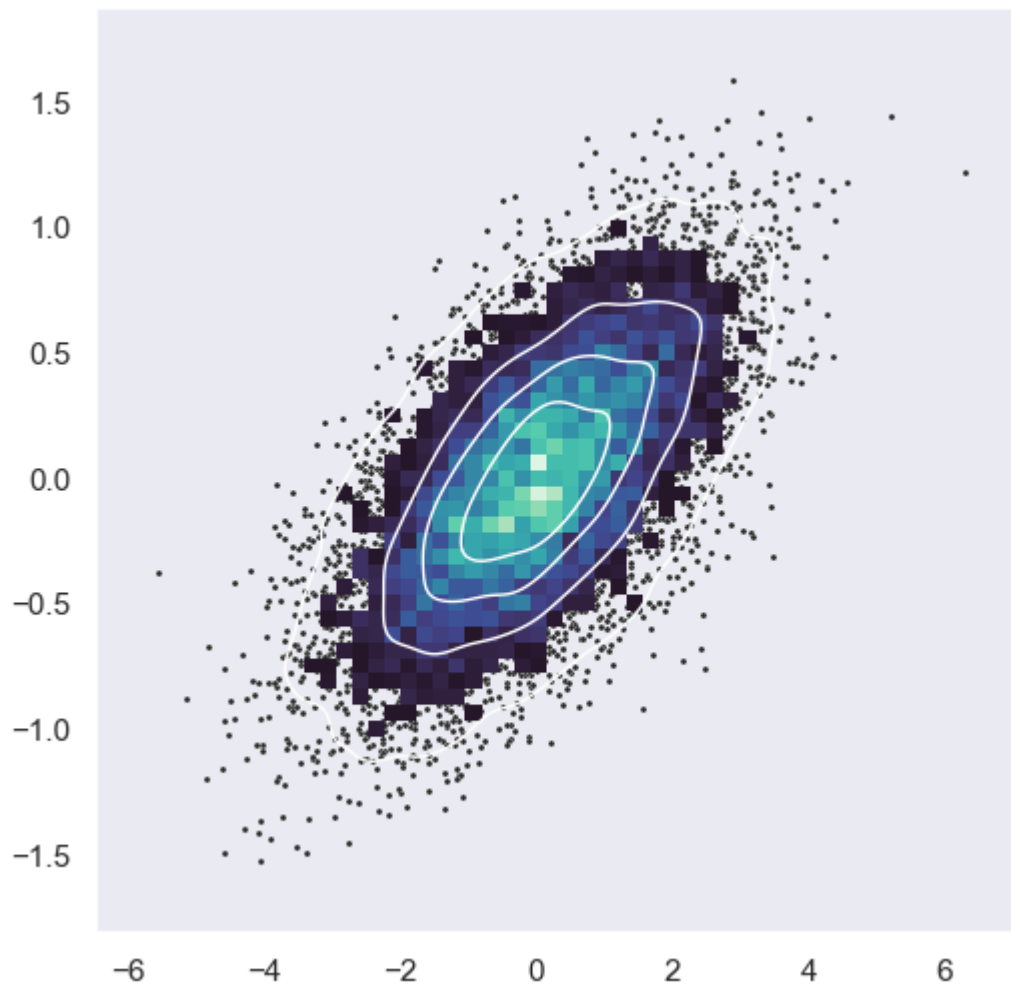
Out[1]: <seaborn.axisgrid.FacetGrid at 0x1a60607bca0>

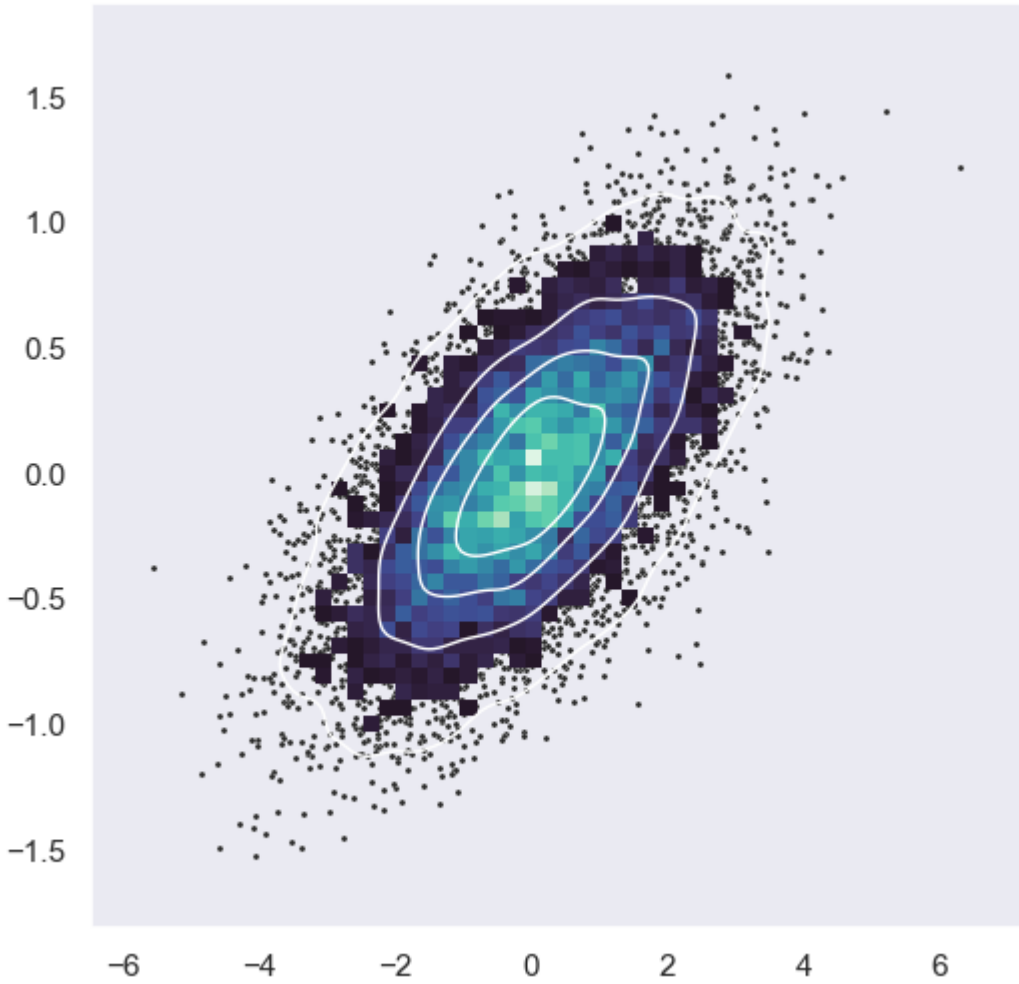


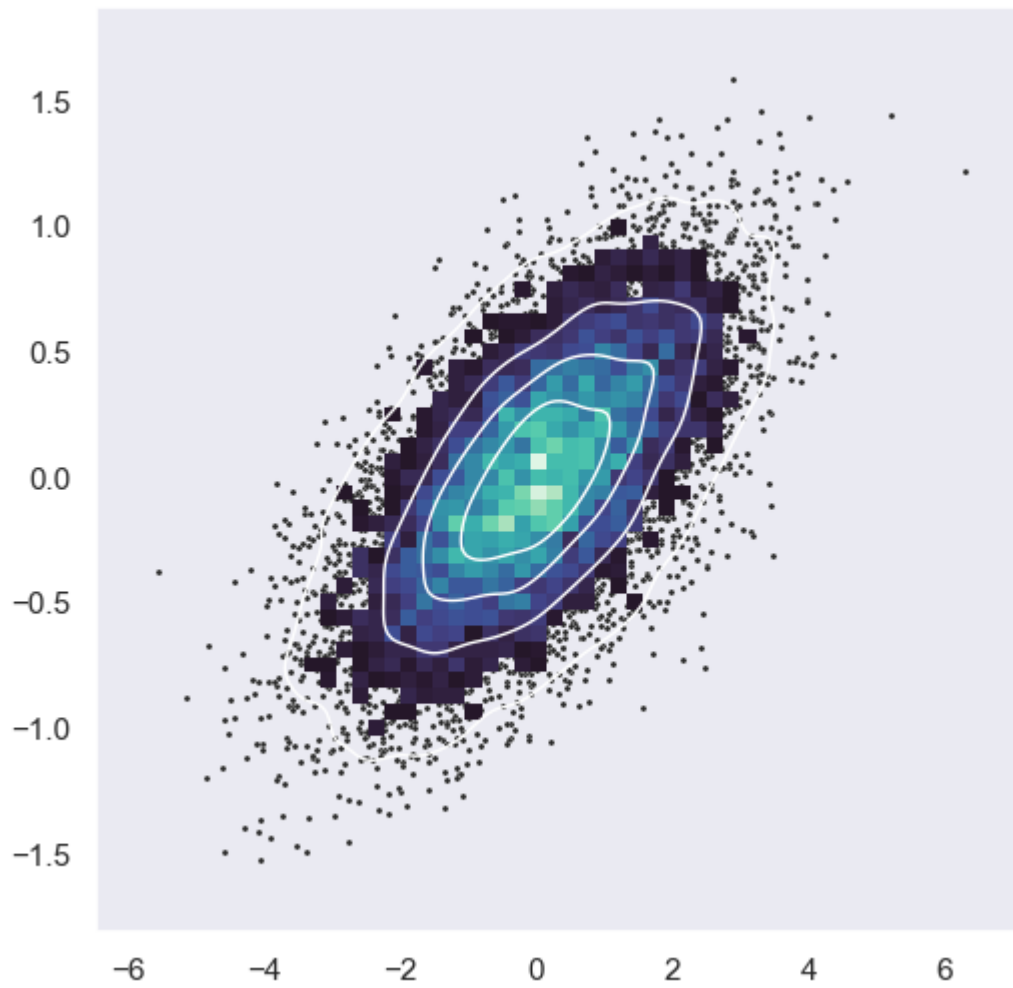
```
In [4]: import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
sns.set_theme(style="dark")

# Simulate data from a bivariate Gaussian
n = 10000
mean = [0, 0]
cov = [(2, .4), (.4, .2)]
rng = np.random.RandomState(0)
x, y = rng.multivariate_normal(mean, cov, n).T
```

```
# Draw a combo histogram and scatterplot with density contours
f, ax = plt.subplots(figsize=(6, 6))
sns.scatterplot(x=x, y=y, s=5, color=".15")
sns.histplot(x=x, y=y, bins=50, pthresh=.1, cmap="mako")
sns.kdeplot(x=x, y=y, levels=5, color="w", linewidths=1)
plt.show()
```







```
In [13]: kashti = sns.load_dataset("titanic")
kashti
```

Out[13]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	d
<b>0</b>	0	3	male	22.0	1	0	7.2500	S	Third	man	True	N
<b>1</b>	1	1	female	38.0	1	0	71.2833	C	First	woman	False	N
<b>2</b>	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	N
<b>3</b>	1	1	female	35.0	1	0	53.1000	S	First	woman	False	N
<b>4</b>	0	3	male	35.0	0	0	8.0500	S	Third	man	True	N
...	...	...	...	...	...	...	...	...	...	...	...	...
<b>886</b>	0	2	male	27.0	0	0	13.0000	S	Second	man	True	N
<b>887</b>	1	1	female	19.0	0	0	30.0000	S	First	woman	False	N
<b>888</b>	0	3	female	NaN	1	2	23.4500	S	Third	woman	False	N
<b>889</b>	1	1	male	26.0	0	0	30.0000	C	First	man	True	N
<b>890</b>	0	3	male	32.0	0	0	7.7500	Q	Third	man	True	N

891 rows × 15 columns

In [15]:

```

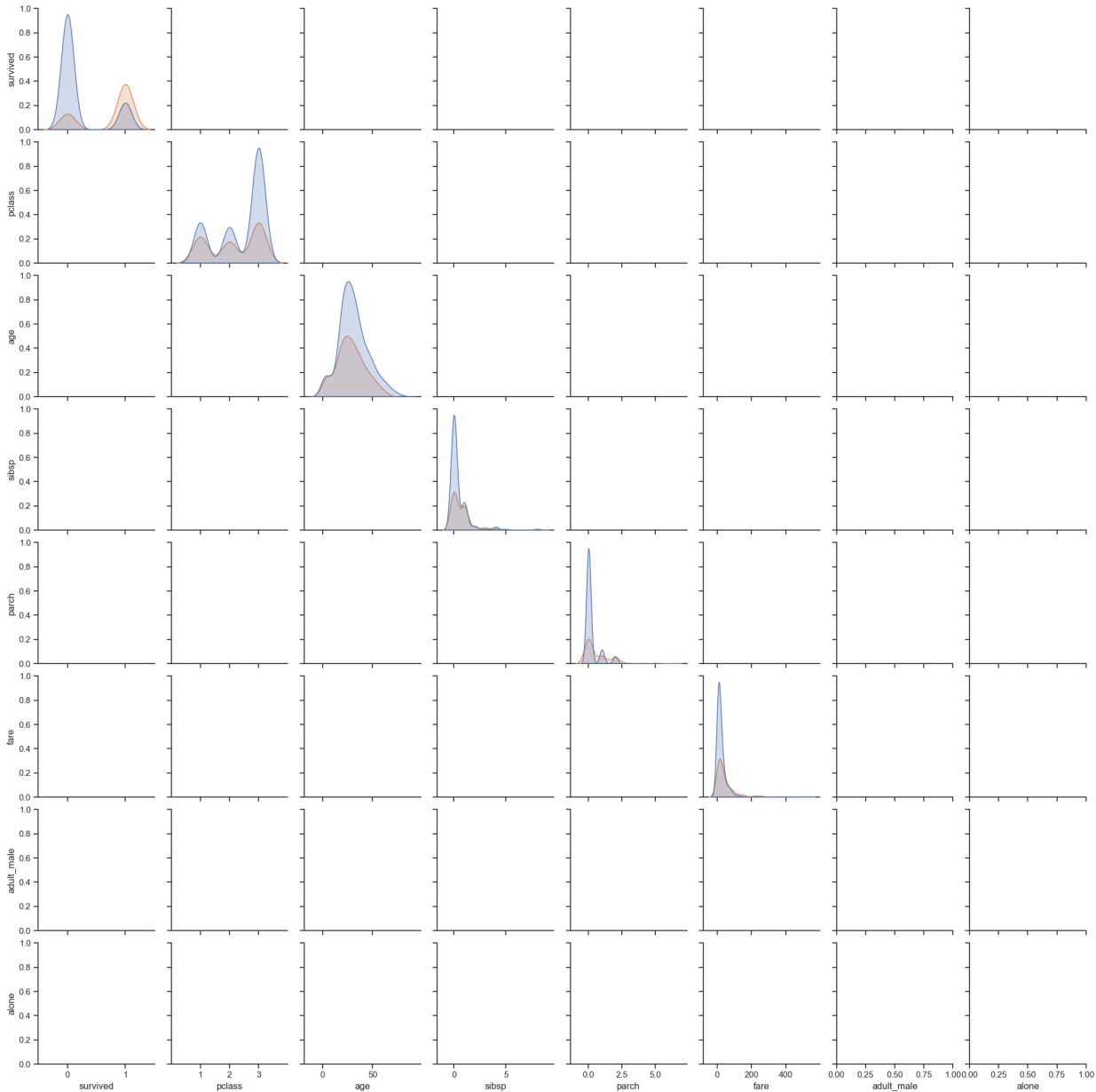
import seaborn as sns
import matplotlib.pyplot as plt
sns.set_theme(style="whitegrid")

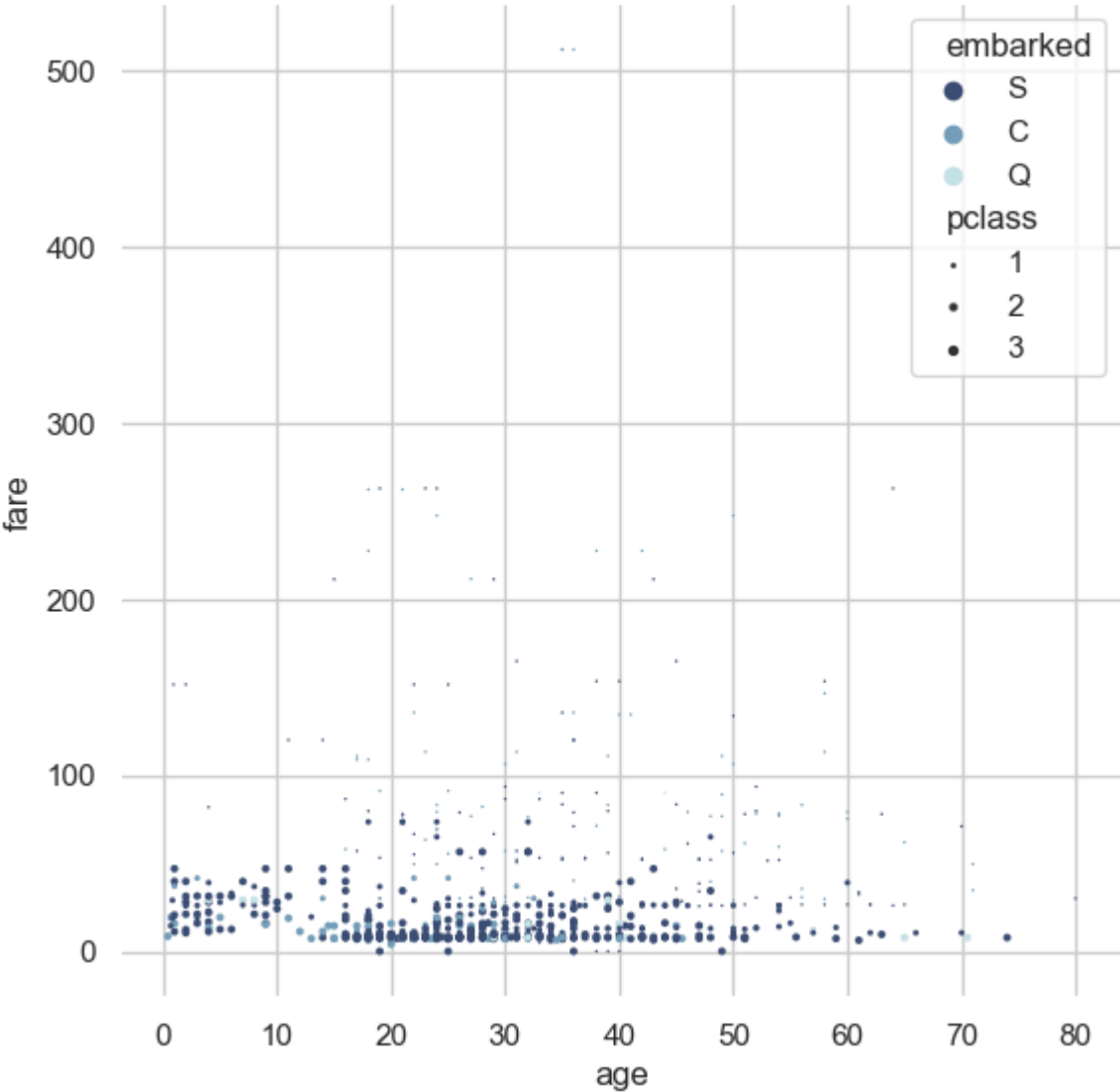
# Load the example diamonds dataset
kashti = sns.load_dataset("titanic")

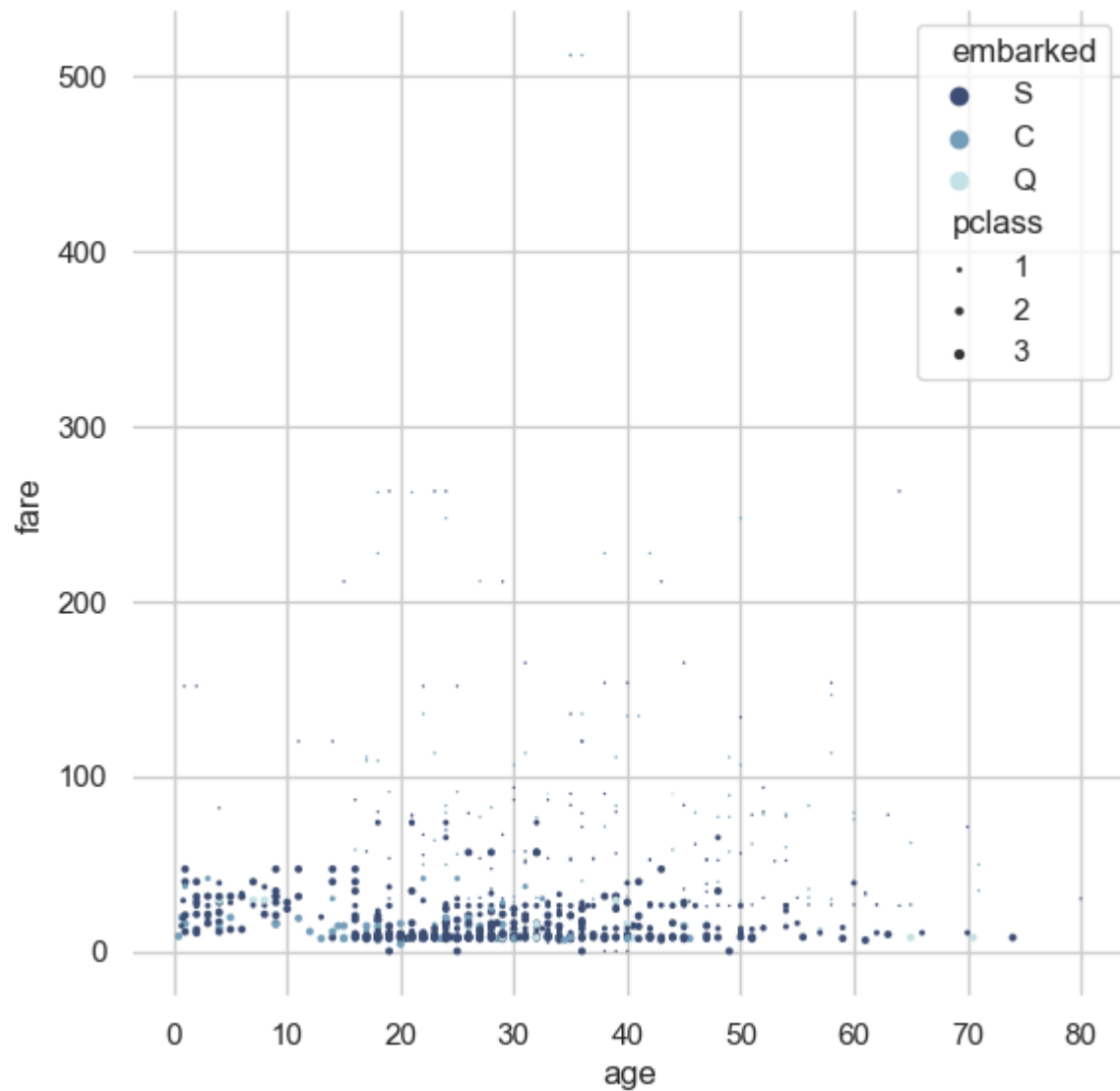
# Draw a scatter plot while assigning point colors and sizes to different
# variables in the dataset
f, ax = plt.subplots(figsize=(6.5, 6.5))
sns.despine(f, left=True, bottom=True)
# clarity_ranking = ["I1", "SI2", "SI1", "VS2", "VS1", "VVS2", "VVS1", "IF"]
sns.scatterplot(x="age", y="fare",
                hue="embarked", size="pclass",
                palette="ch:r=-.2,d=.3_r",
                sizes=(1, 8), linewidth=0,
                data=kashti, ax=ax)

plt.show()

```







```
In [12]: diamonds = sns.load_dataset("diamonds")  
diamonds
```



Out[12]:

	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
...	...	...	...	...	...	...	...	...	...	...
53935	0.72	Ideal	D	SI1	60.8	57.0	2757	5.75	5.76	3.50
53936	0.72	Good	D	SI1	63.1	55.0	2757	5.69	5.75	3.61
53937	0.70	Very Good	D	SI1	62.8	60.0	2757	5.66	5.68	3.56
53938	0.86	Premium	H	SI2	61.0	58.0	2757	6.15	6.12	3.74
53939	0.75	Ideal	D	SI2	62.2	55.0	2757	5.83	5.87	3.64

53940 rows × 10 columns