

```
In [1]: import pandas as pd
import seaborn as sns
```

```
In [ ]: df.head(10)
```

```
In [ ]: df.tail(5)
```

```
Out[35]:
```

	Month	#Passengers
139	1960-08	606
140	1960-09	508
141	1960-10	461
142	1960-11	390
143	1960-12	432

```
In [ ]: df.shape
```

```
Out[36]: (144, 2)
```

```
In [ ]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 144 entries, 0 to 143
Data columns (total 2 columns):
#   Column          Non-Null Count  Dtype
---  -
0   Month           144 non-null   object
1   #Passengers      144 non-null   int64
dtypes: int64(1), object(1)
memory usage: 2.4+ KB
```

```
In [ ]: df.isnull().sum()
```

```
Out[38]: Month           0
#Passengers          0
dtype: int64
```

```
In [ ]: df.describe()
```

```
Out[39]:
```

	#Passengers
count	144.000000
mean	280.298611
std	119.966317
min	104.000000
25%	180.000000
50%	265.500000
75%	360.500000
max	622.000000

```
In [ ]: df.corr()
```

C:\Users\student\AppData\Local\Temp\ipykernel_11360\1134722465.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.
df.corr()

Out[40]:

	#Passengers
#Passengers	1.0

```
In [ ]: sns.heatmap(df.corr())
```

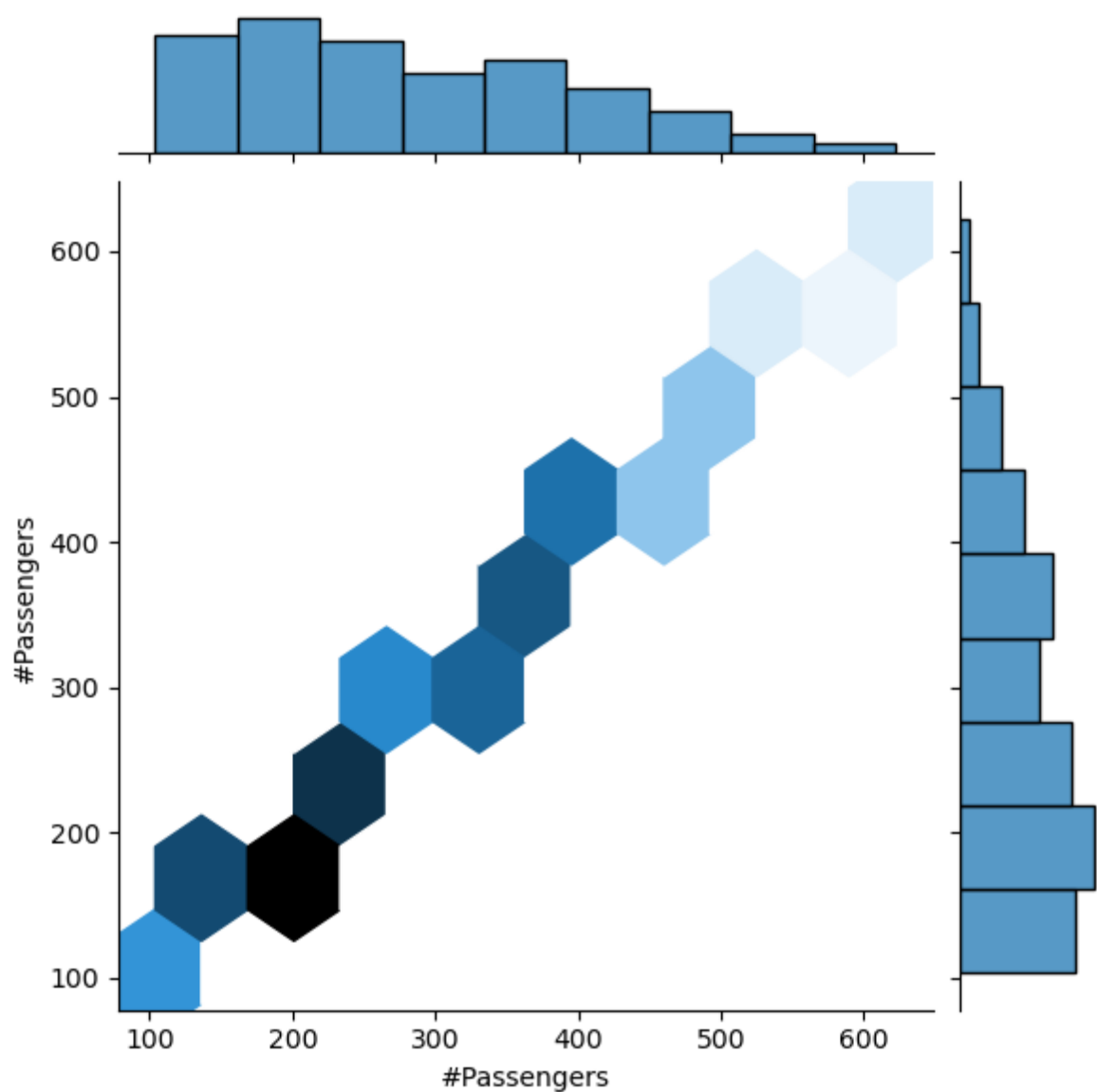
C:\Users\student\AppData\Local\Temp\ipykernel_11360\58359773.py:1: FutureWarning: The default value of numeric_only in DataFrame.corr is deprecated. In a future version, it will default to False. Select only valid columns or specify the value of numeric_only to silence this warning.
sns.heatmap(df.corr())

Out[41]: <Axes: >



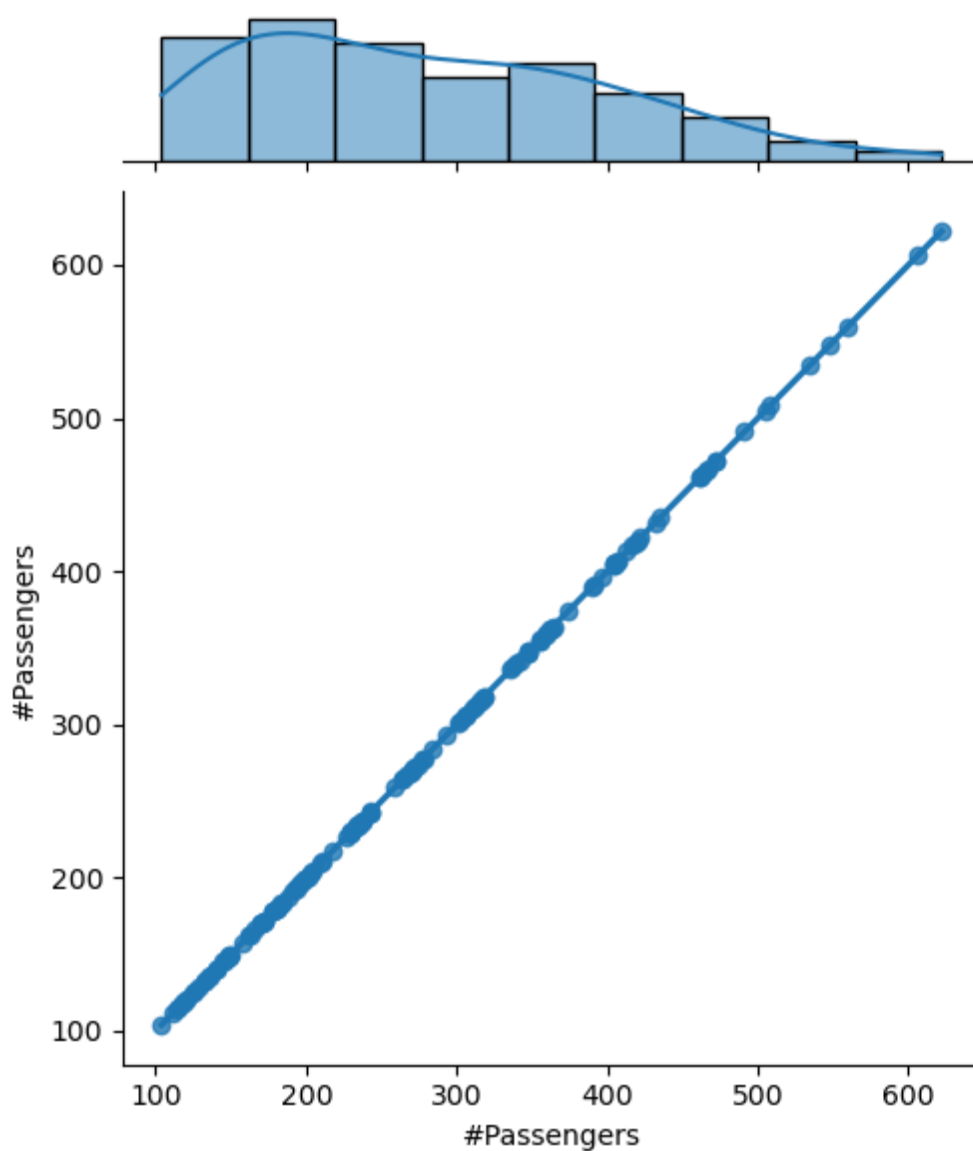
```
In [ ]: sns.jointplot(x="#Passengers",y="#Passengers",data = df,kind = 'hex')
```

```
Out[42]: <seaborn.axisgrid.JointGrid at 0x23a28ef2390>
```



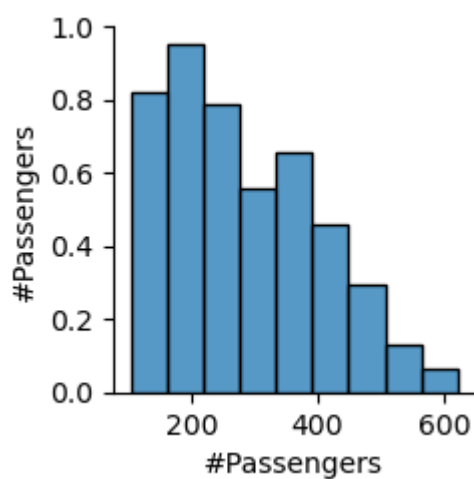
```
In [ ]: sns.jointplot(x="#Passengers",y="#Passengers",data = df,kind = 'reg')
```

```
Out[43]: <seaborn.axisgrid.JointGrid at 0x23a2907fdd0>
```



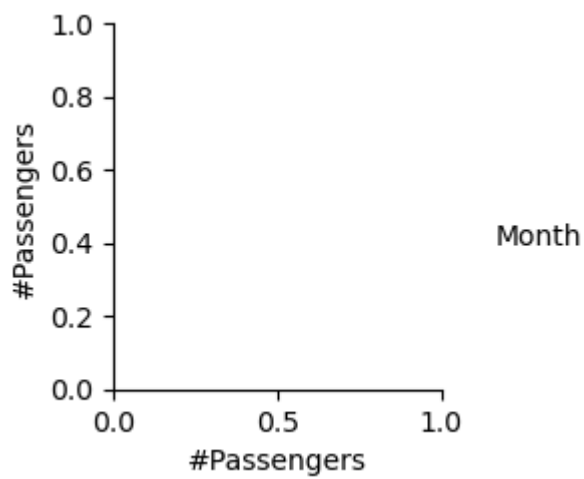
```
In [ ]: sns.pairplot(df)
```

```
Out[44]: <seaborn.axisgrid.PairGrid at 0x23a290a6350>
```



```
In [ ]: sns.pairplot(df,hue="Month")
```

```
Out[45]: <seaborn.axisgrid.PairGrid at 0x23a297c1c10>
```



```
In [ ]: sns.distplot(df["#Passengers"],color="red")
```

C:\Users\student\AppData\Local\Temp\ipykernel_11360\2669787852.py:1: UserWarning:

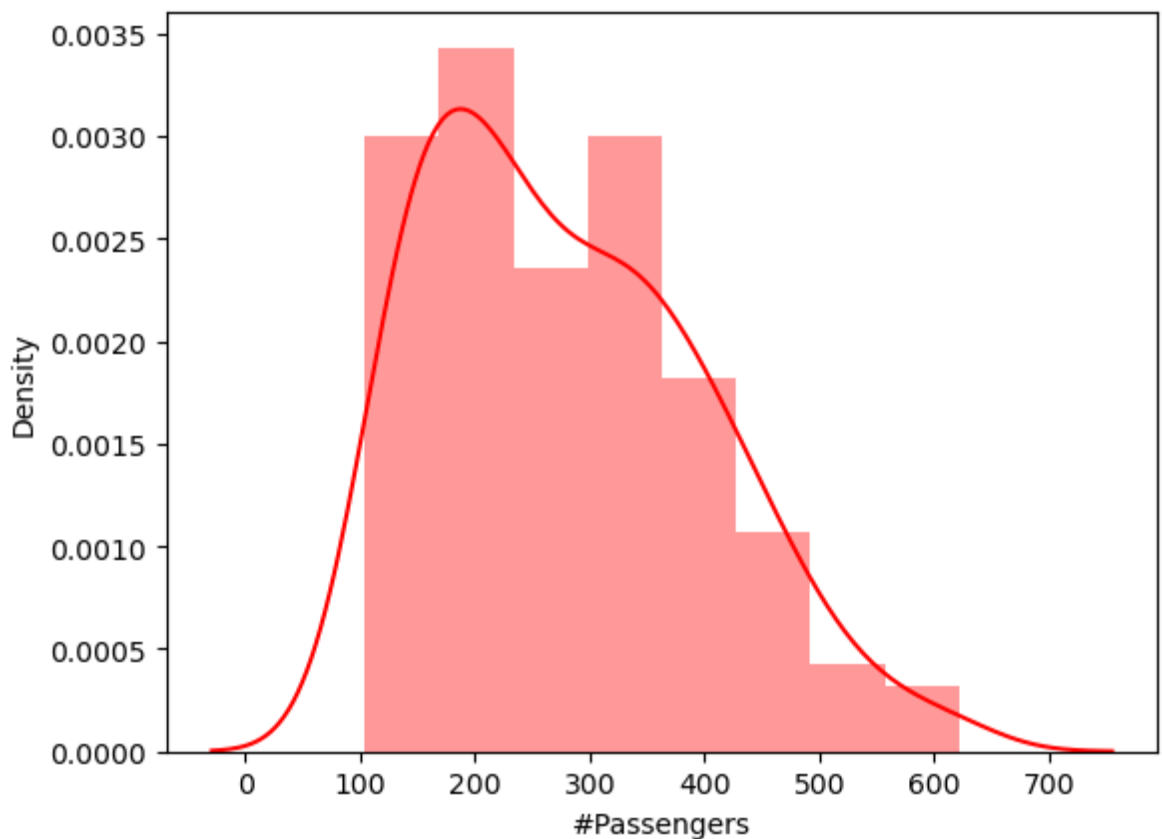
`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

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> (<https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751>)

```
sns.distplot(df["#Passengers"],color="red")
```

Out[46]: <Axes: xlabel='#Passengers', ylabel='Density'>



```
In [ ]: sns.distplot(df["#Passengers"],kde = False,bins = 10)
```

C:\Users\student\AppData\Local\Temp\ipykernel_11360\937273720.py:1: UserWarning:

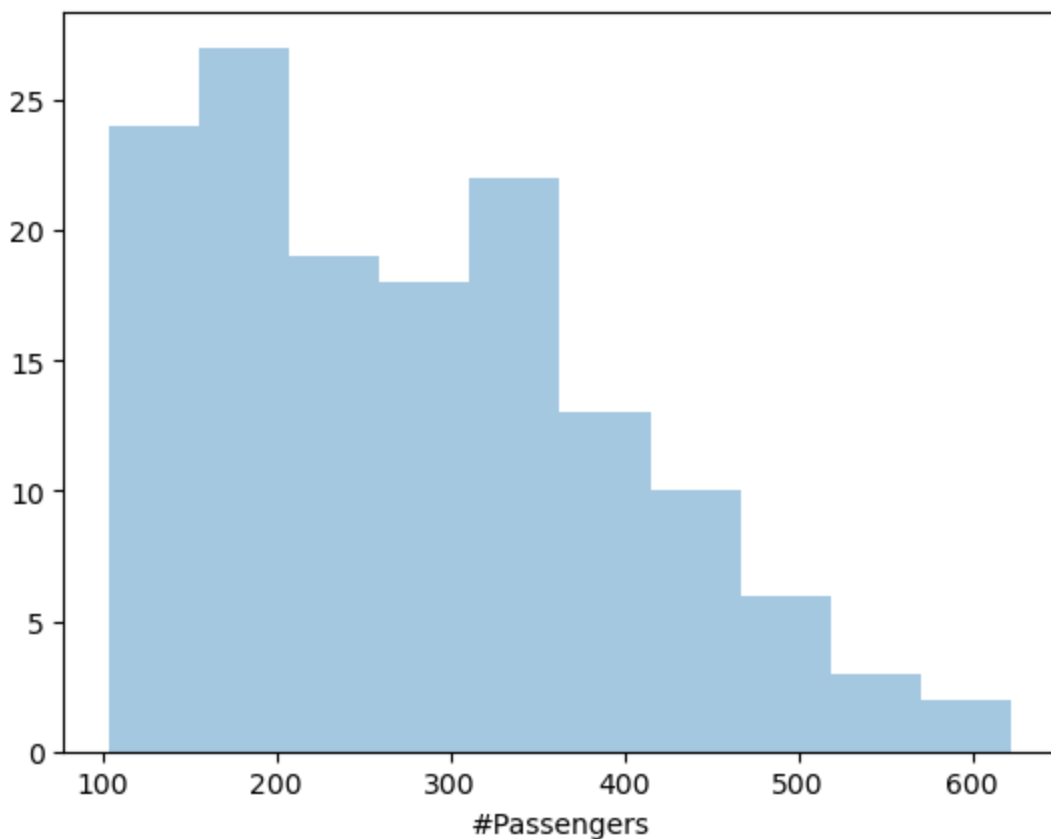
`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

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> (<https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751>)

```
sns.distplot(df["#Passengers"],kde = False,bins = 10)
```

Out[61]: <Axes: xlabel='#Passengers'>



```
In [ ]: sns.countplot("Month",data=df)
```

TypeError

Traceback (most recent call last)

Cell In[60], line 1

----> 1 sns.countplot("Month",data=df)

TypeError: countplot() got multiple values for argument 'data'

```
In [ ]: sns.barplot('#Passengers',data=df)
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[57], line 1  
----> 1 sns.barplot('#Passengers',data=df)  
  
TypeError: barplot() got multiple values for argument 'data'
```

```
In [ ]:
```

```
In [ ]:
```