

Que 1: Name any five plots that we can plot using the Seaborn library. Also, state the uses of each plot.

Scatter plot : To see the relationship between two variables

Histogram : To see which distribution is followed by data

barplot : To represent Categorical data

Line Plot : To represent Time series like data

Box plot : to represent how many elements belong to quartile 1 and 3 and which element is outlier

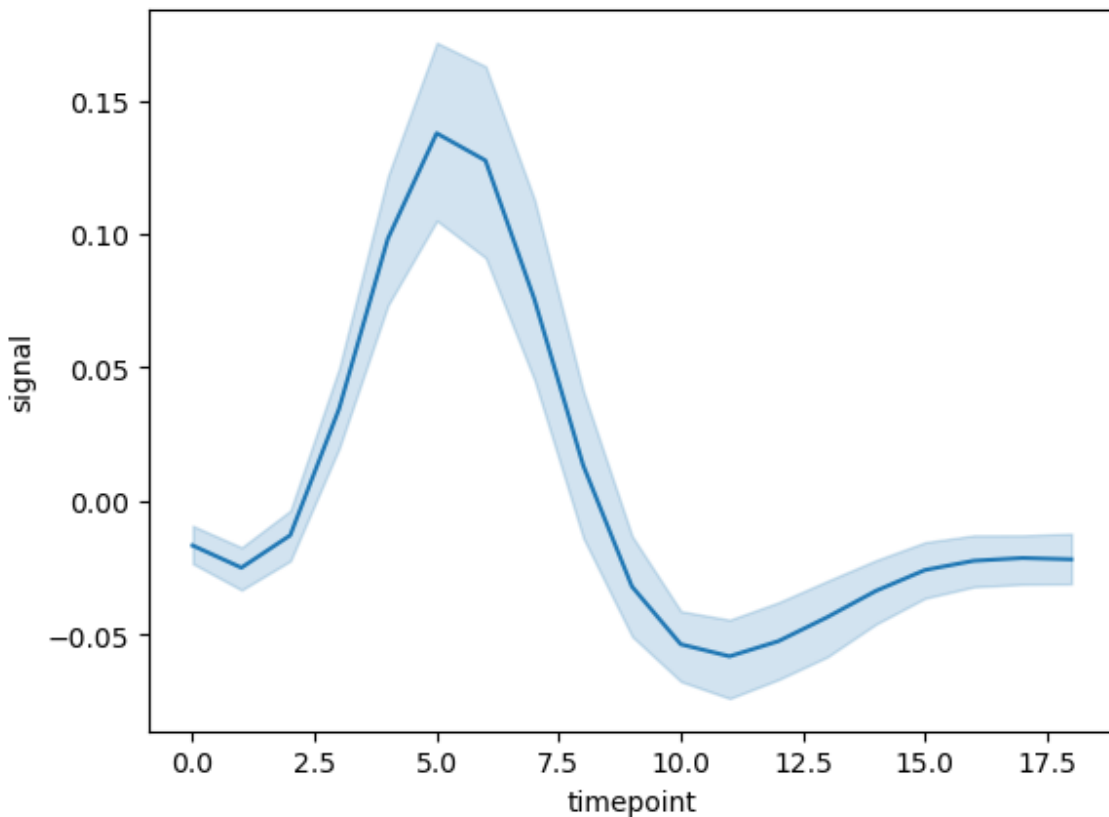
Que 2: Load the "fmri" dataset using the load_dataset function of seaborn. Plot a line plot using x = "timepoint" and y = "signal" for different events and regions.

In [5]:

```
import seaborn as sns
data = sns.load_dataset("fmri")
sns.lineplot(x=data.timepoint, y=data.signal)
```

Out[5]:

<AxesSubplot:xlabel='timepoint', ylabel='signal'>



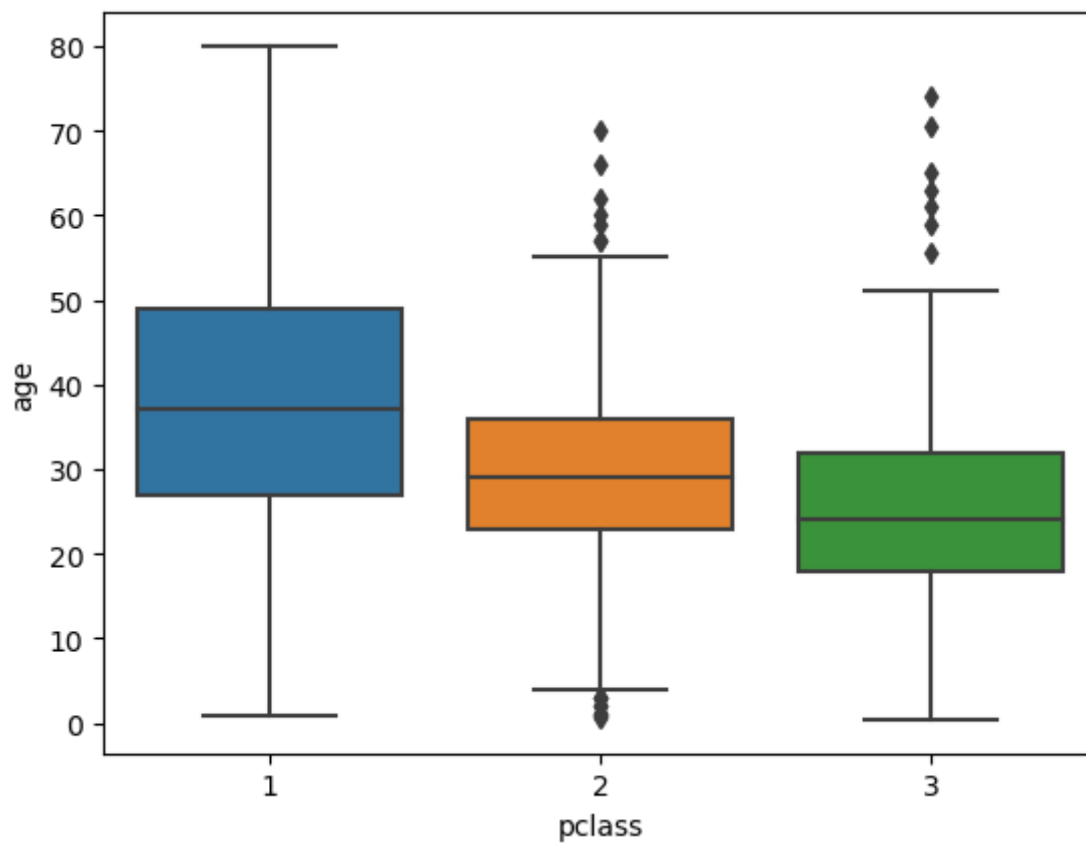
Que 3: Load the "titanic" dataset using the load_dataset function of seaborn. Plot two box plots using x = 'pclass', y = 'age' and y = 'fare'.

In [8]:

```
data1 = sns.load_dataset("titanic")  
sns.boxplot(x = 'pclass', y = 'age', data = data1)
```

Out[8]:

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

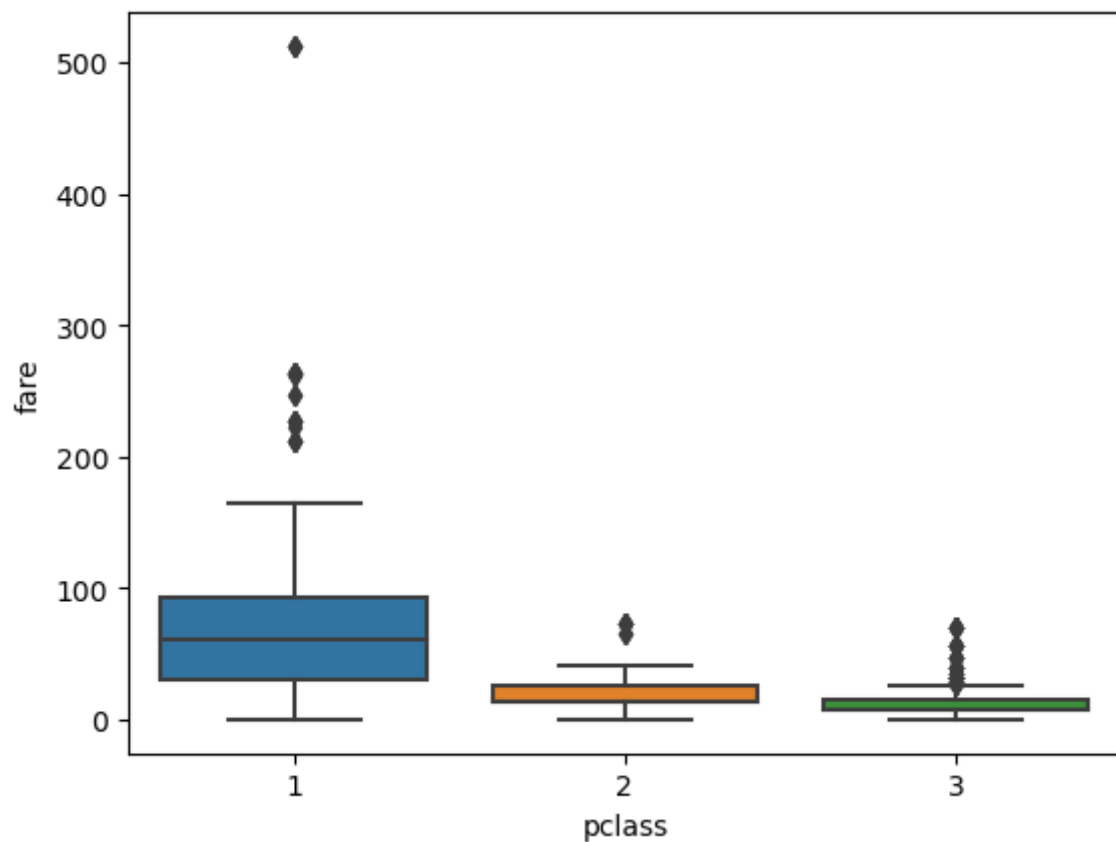


In [9]:

```
sns.boxplot(x = 'pclass', y = 'fare', data = data1)
```

Out[9]:

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



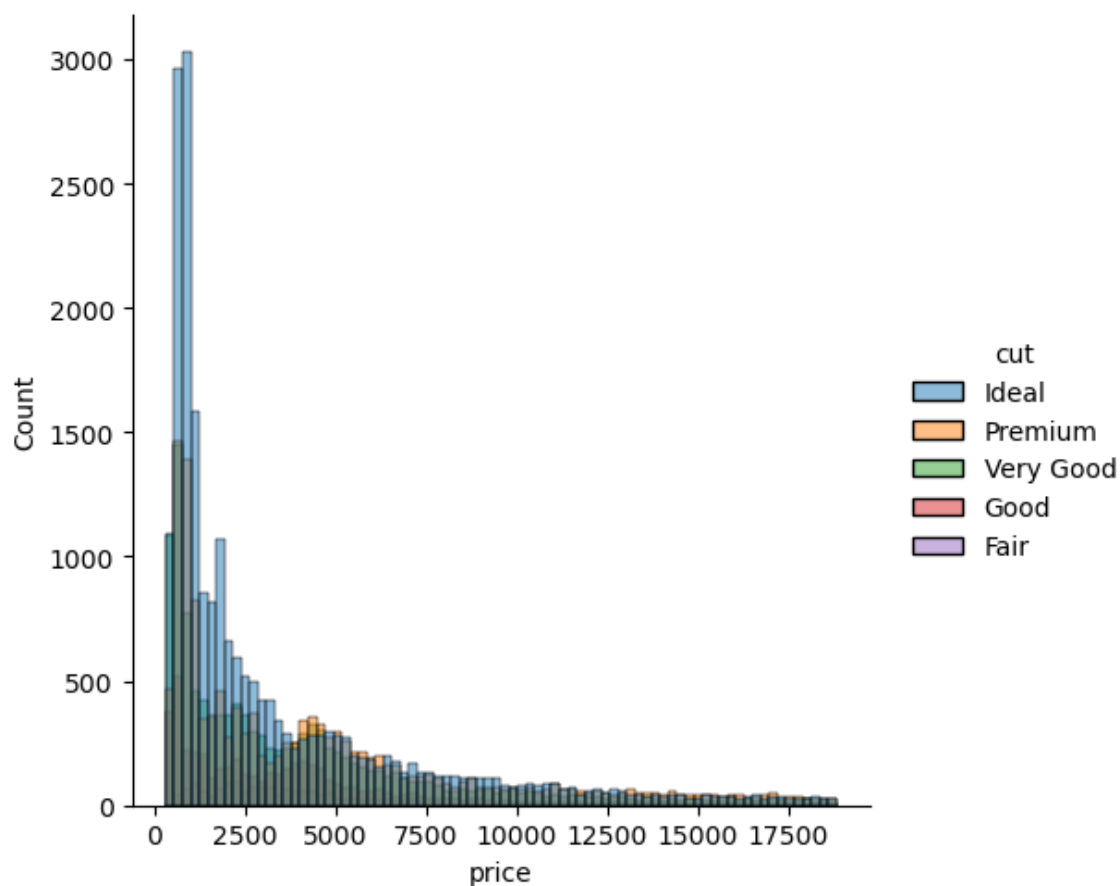
Que 4: Use the "diamonds" dataset from seaborn to plot a histogram for the 'price' column. Use the hue parameter for the 'cut' column of the diamonds dataset.

In [11]:

```
data2 = sns.load_dataset("diamonds")  
sns.displot(x = 'price', data = data2, hue = 'cut' )
```

Out[11]:

<seaborn.axisgrid.FacetGrid at 0x238ee937e80>



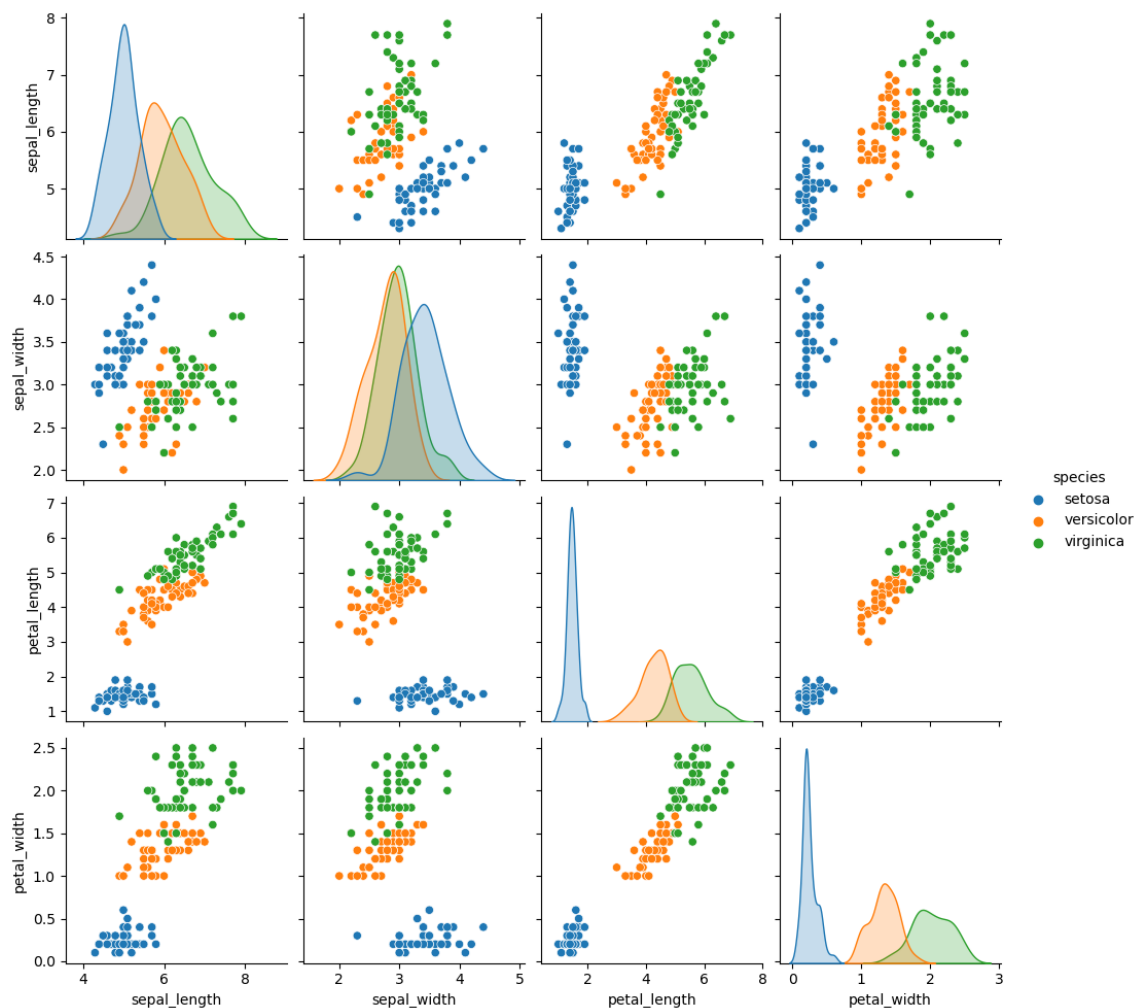
Que 5: Use the "iris" dataset from seaborn to plot a pair plot. Use the hue parameter for the "species" column of the iris dataset.

In [12]:

```
data3 = sns.load_dataset("iris")  
sns.pairplot(data3, hue="species")
```

Out[12]:

<seaborn.axisgrid.PairGrid at 0x238ee9371c0>



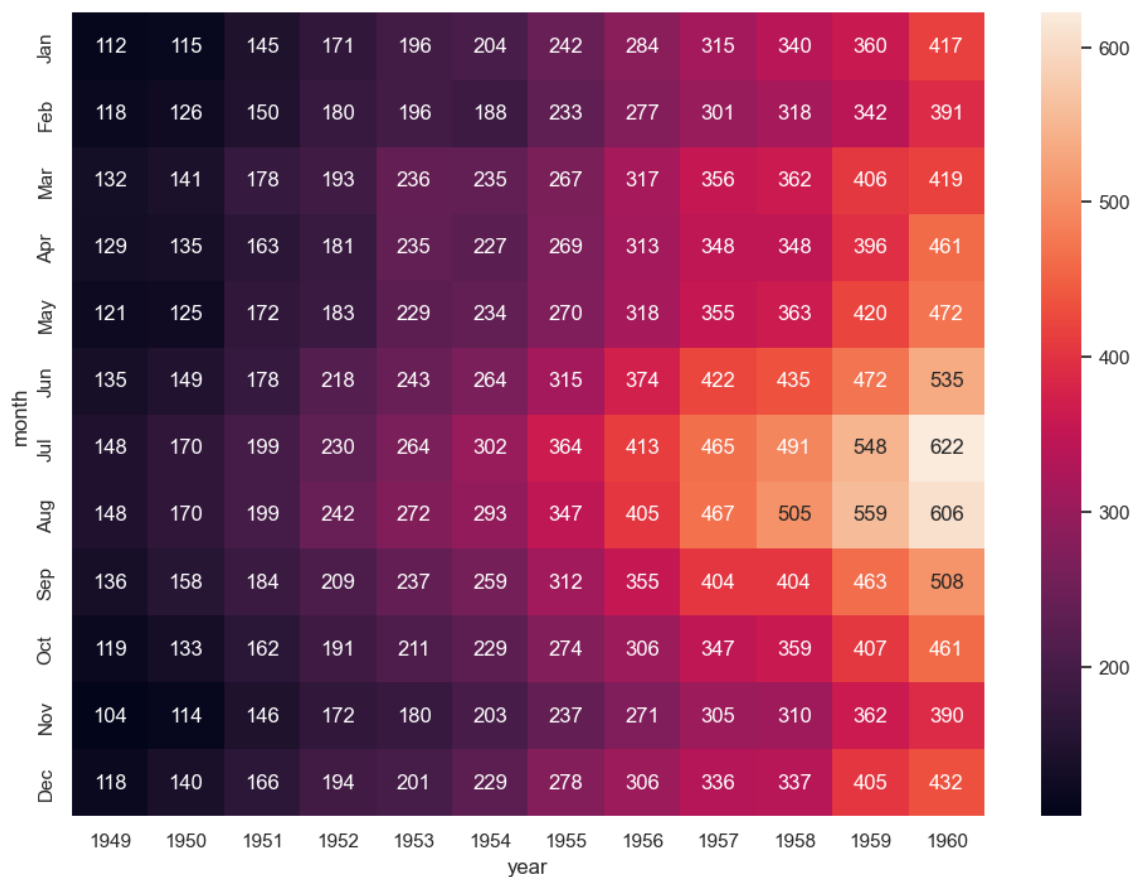
Que 6: Use the "flights" dataset from seaborn to plot a heatmap.

In [16]:

```
data4= sns.load_dataset('flights')
sns.set(rc={'figure.figsize':(11.7,8.27)})
data4 = data4.pivot('month','year','passengers')
sns.heatmap(data = data4,annot = True,fmt = 'd')
```

Out[16]:

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



In []: