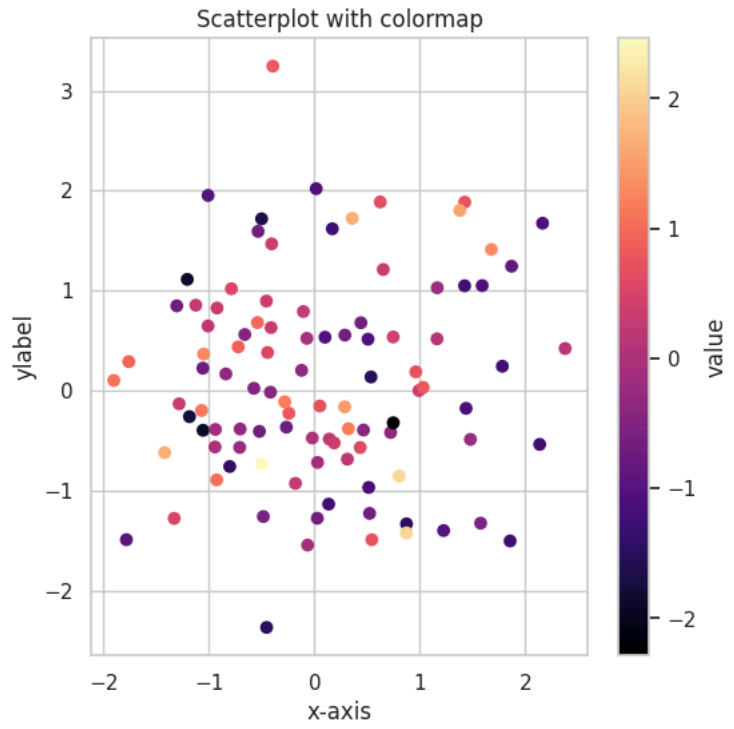
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

#sample dataframe with multiple columns
data=pd.DataFrame({
 "x":np.random.randn(100),
  "y":np.random.randn(100),
  "value":np.random.randn(100)
})

#define the colormap and alpha values
cmap="magma"
alpha=1

#create the scatterplot
plt.figure(figsize=(6,6))
plt.scatter(data["x"],data["y"],c=data["value"],cmap=cmap,alpha=alpha)

#customize the plot(otpional)
plt.xlabel("x-axis")
plt.ylabel("ylabel")
plt.title("Scatterplot with colormap")
plt.colorbar(label="value")
```

```
<matplotlib.colorbar.Colorbar at 0x78b93cacb250>
```




```
#Importing required libraries
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline



#Setting a figure size for all the plots we shall be drawing inline

sns.set(rc={"figure.figsize": (6,6)})



current_palette=sns.color_palette()
sns.palplot(current_palette)
```

```
sns.palplot(sns.color_palette("hls",8))
```

```
sns.palplot(sns.color_palette("husl",8))
```

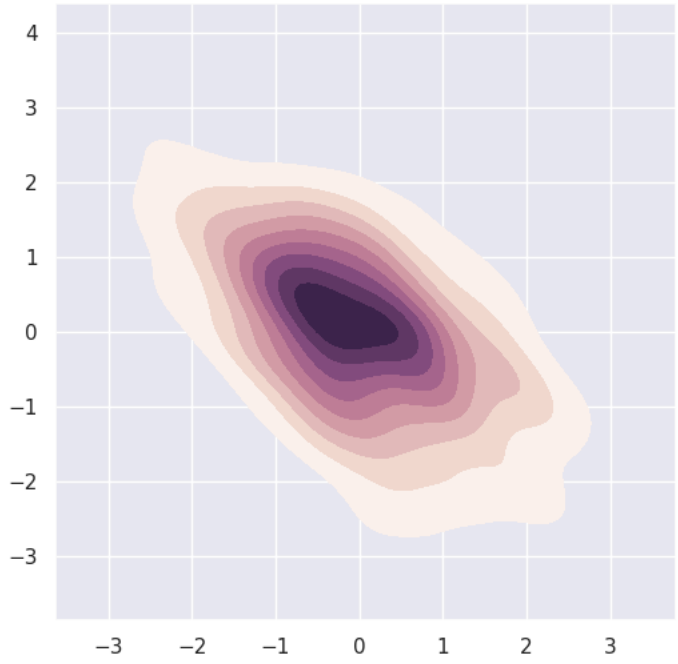
```
sample_colors=["windows blue","amber","greyish","faded green","dusty purple","pale red","medium green","denim blue"]
sns.palplot(sns.xkcd_palette(sample_colors))
```

```
#Default Matplotlib Cubehelix version:
sns.palplot(sns.color_palette("cubehelix",8))
```

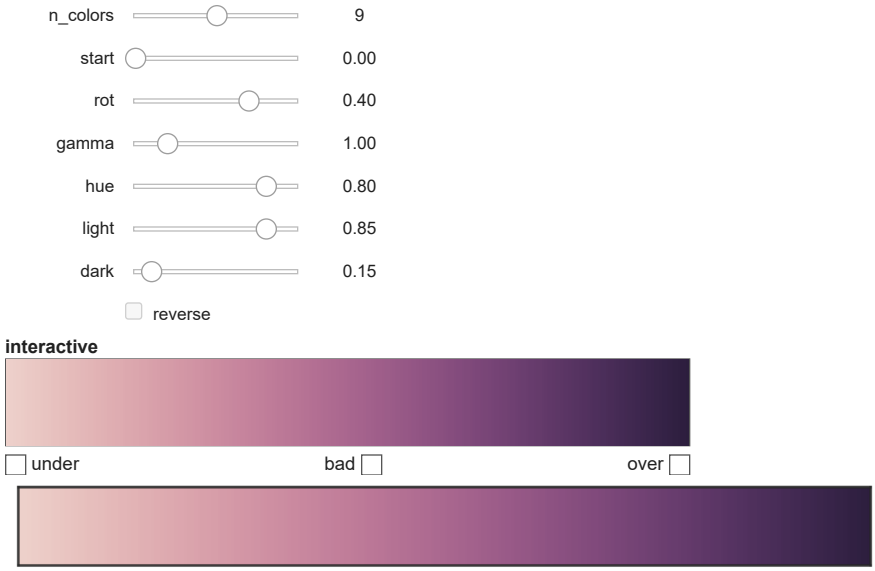
```
#Default seaborn Cubehelix version:
sns.palplot(sns.cubehelix_palette(8))
```

```
#Density plot with seaborn deafults:
x,y = np.random.multivariate_normal([0,0],[[1,-.5],[-.5,1]],size=300).T



sample_cmap = sns.cubehelix_palette(light=1, as_cmap=True)
sns.kdeplot(x=x,y=y, cmap=sample_cmap,shade=True)
```

```
<ipython-input-32-b2ffe8c16817>:2: FutureWarning:

`shade` is now deprecated in favor of `fill`; setting `fill=True`.
This will become an error in seaborn v0.14.0; please update your code.

  sns.kdeplot(x=x,y=y, cmap=sample_cmap,shade=True)
<Axes: >
```




```
sns.choose_cubehelix_palette(as_cmap=True)
```

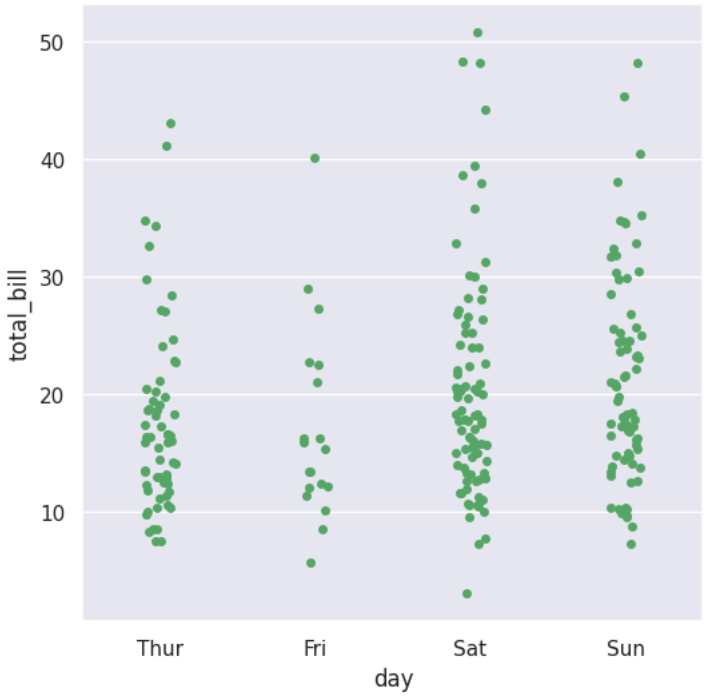



```
sns.palplot(sns.cubehelix_palette(n_colors=8, start=1.7, rot=0.2, dark=0,light=.95,reverse=True))
```

```
#Generics Seaborn

#Loading up bulit in dataset:
tips=sns.load_dataset("tips")
```

```
#Creating strip plot for day wise column
sns.stripplot(x="day", y="total_bill", data=tips, color="g")
```

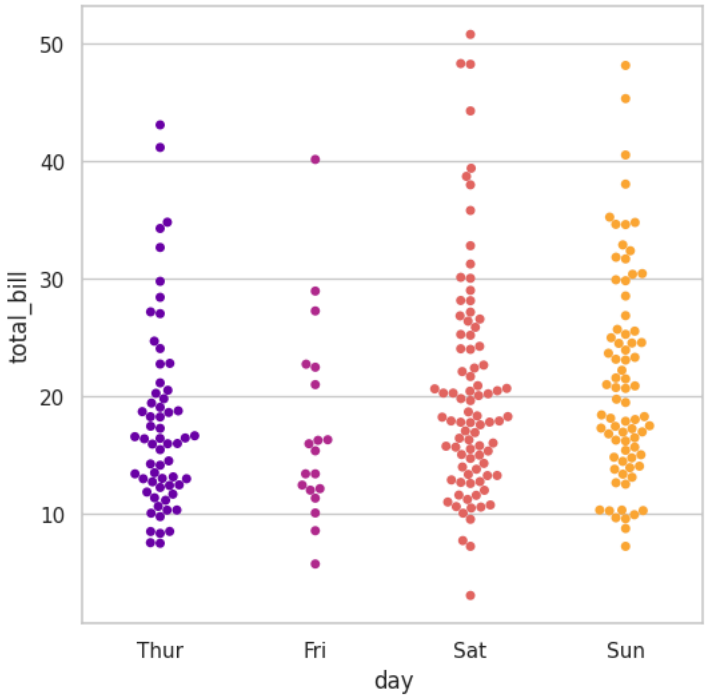
```
<Axes: xlabel='day', ylabel='total_bill'>
```




```
#Set theme:
sns.set_style('whitegrid')
```

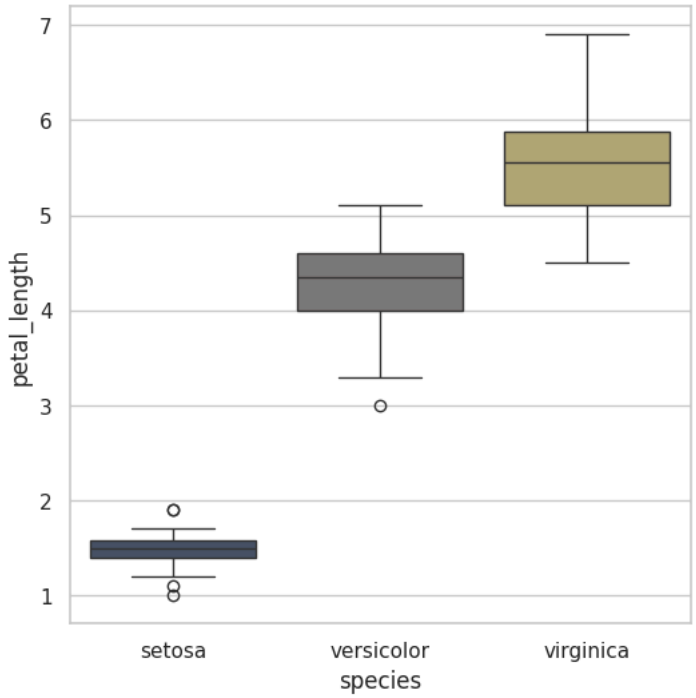
```
#Creating Strip plot for day-wise column
sns.swarmplot(x="day", y="total_bill", data=tips, palette="plasma")
```

```
<ipython-input-38-0ff2cc9e5b38>:2: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and set `legend

  sns.swarmplot(x="day", y="total_bill", data=tips, palette="plasma")
<Axes: xlabel='day', ylabel='total_bill'>
```



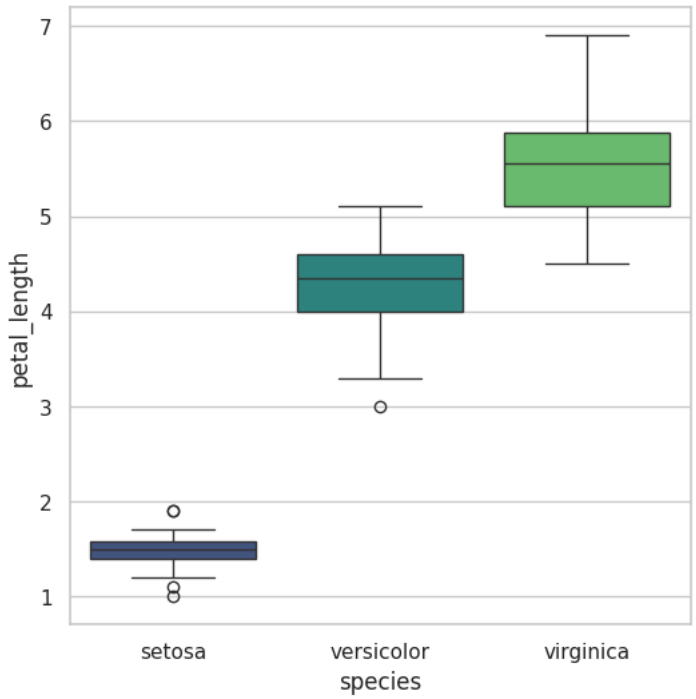
```
iris=sns.load_dataset("iris")
sns.boxplot (x="species",y="petal_length",data=iris,palette="cividis")
```

```
<ipython-input-39-79762b032e68>:2: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0.

  sns.boxplot (x="species",y="petal_length",data=iris,palette="cividis")
<Axes: xlabel='species', ylabel='petal_length'>
```



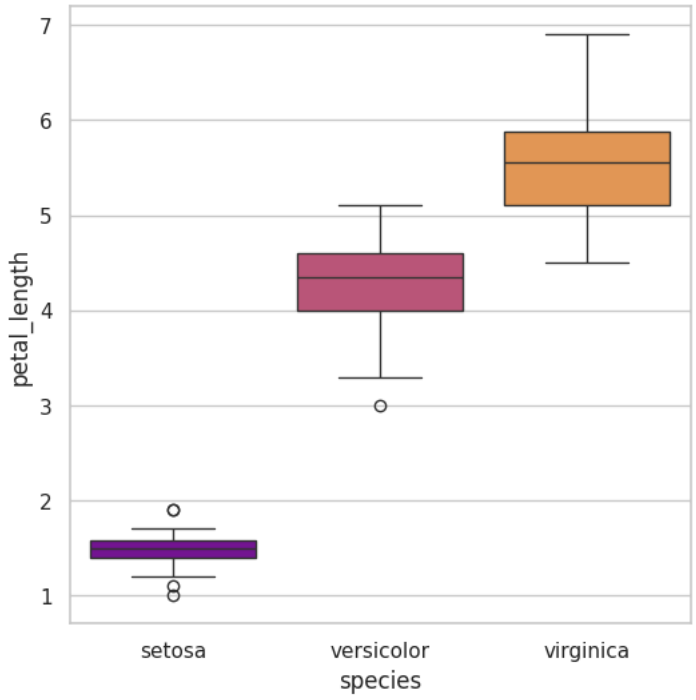

```
iris=sns.load_dataset("iris")
sns.boxplot (x="species",y="petal_length",data=iris,palette="viridis")
```

```
<ipython-input-19-de0b96a714bd>:2: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0.

  sns.boxplot (x="species",y="petal_length",data=iris,palette="viridis")
<Axes: xlabel='species', ylabel='petal_length'>
```



```
iris=sns.load_dataset("iris")
sns.boxplot (x="species",y="petal_length",data=iris,palette="plasma")
```

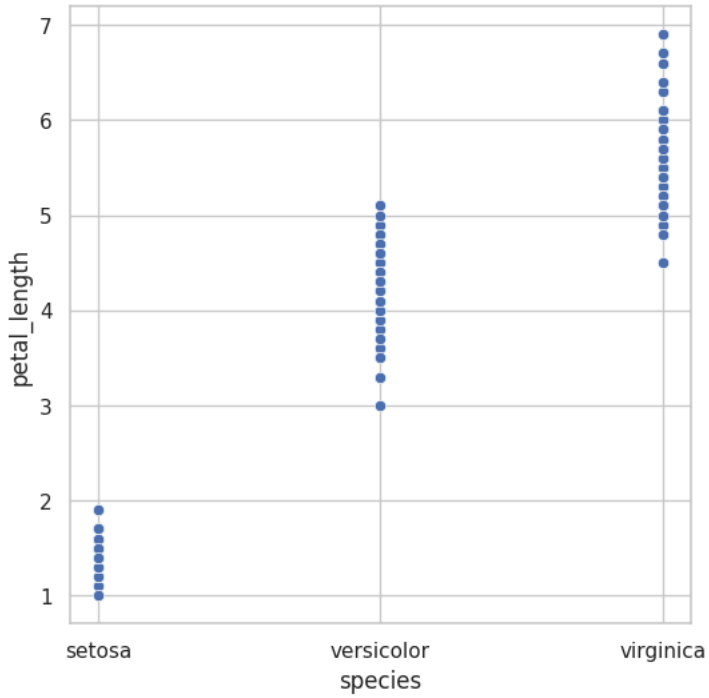
```
<ipython-input-20-d66574d48c17>:2: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0.

  sns.boxplot (x="species",y="petal_length",data=iris,palette="plasma")
<Axes: xlabel='species', ylabel='petal_length'>
```



Start coding or generate with AI.

```
iris=sns.load_dataset("iris")
sns.scatterplot (x="species",y="petal_length",data=iris,palette="cividis")
```

```
<ipython-input-21-7a8b3af9ad1c>:2: UserWarning: Ignoring `palette` because no `hue` variable has been assigned.
  sns.scatterplot (x="species",y="petal_length",data=iris,palette="cividis")
<Axes: xlabel='species', ylabel='petal_length'>
```



```
Start coding or generate with AI.
```