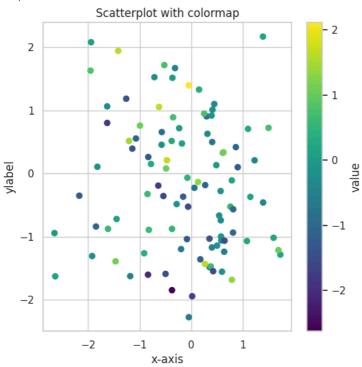
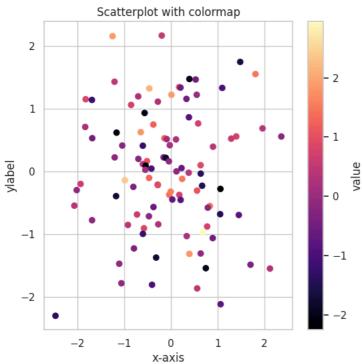
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
#sample dataframe with multiple columns
data=pd.DataFrame({
    "x":np.random.randn(100),
     "y":np.random.randn(100),
    "value":np.random.randn(100)
})
#define the colomap and alpha values
cmap="viridis"
alpha=1
#create the 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 0x7ec2dabf39a0>



```
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 colomap 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 0x7ec2daac37f0>



#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

#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))



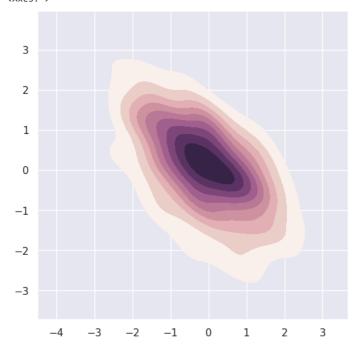
#density plot with seaborn defaults:
x,y = np.random.multivariate\_normal([0,0],[[1,-.5],[-.5,1]],size=300).T

sample\_cmap = sns.cubehelix\_palette(light=1,as\_cmap=True)
sns.kdeplot(x=x, y=y, cmap=sample\_cmap, shade=True)

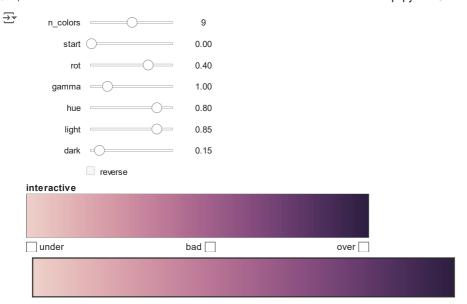
<ipython-input-53-5793652c068f>:2: FutureWarning:

`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: >



 $\verb|sns.choose_cubehelix_palette(as_cmap=True)|\\$ 



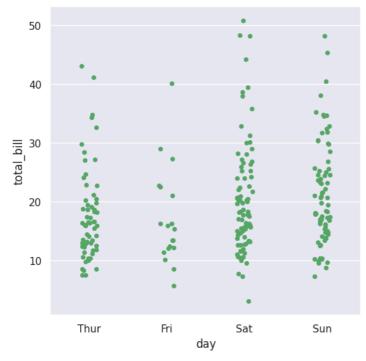
 $\verb|sns.palplot(sns.cubehelix_palette(n_colors=8, \verb|start=1.7|, \verb|rot=0.2|, \verb|dark=0|, light=.95|, \verb|reverse=True|)||$ 



#loading up built\_in dataset:
tips=sns.load\_dataset("tips")

#crteating strip plot for day-wise revenue:
sns.stripplot(x="day",y="total\_bill",data=tips,color="g")

</pre

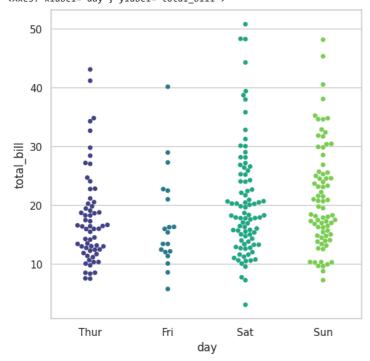


#set theme
sns.set\_style('whitegrid')
#creating strip plot for day-wise revenue:
sns.swarmplot(x="day",y="total\_bill",data=tips,palette="viridis")

<ipython-input-57-dffb224f51d3>:4: FutureWarning:

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

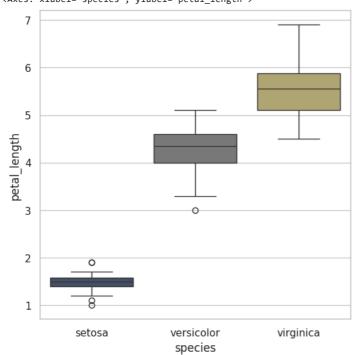
sns.swarmplot(x="day",y="total\_bill",data=tips,palette="viridis") <Axes: xlabel='day', ylabel='total\_bill'>



iris=sns.load\_dataset("iris") sns.boxplot(x="species",y="petal\_length",data=iris,palette="cividis")

→ <ipython-input-58-cf3158b8d153>:2: FutureWarning:

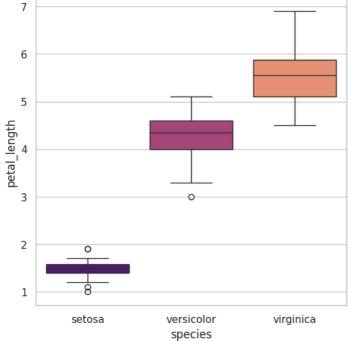
Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and se sns.boxplot(x="species",y="petal\_length",data=iris,palette="cividis") <Axes: xlabel='species', ylabel='petal\_length'>



iris=sns.load\_dataset("iris") sns.boxplot(x="species",y="petal\_length",data=iris,palette="magma") <ipython-input-59-81ec1a23e432>:2: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and so sns.boxplot(x="species",y="petal\_length",data=iris,palette="magma")

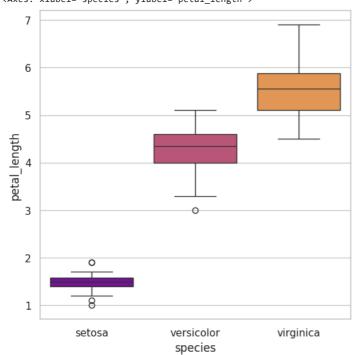
<Axes: xlabel='species', ylabel='petal\_length'> 7



iris=sns.load\_dataset("iris") sns.boxplot(x="species",y="petal\_length",data=iris,palette="plasma")

→ <ipython-input-60-54fc74a0f692>:2: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and  $s_i$ sns.boxplot(x="species",y="petal\_length",data=iris,palette="plasma") <Axes: xlabel='species', ylabel='petal\_length'>



iris=sns.load\_dataset("iris") sns.boxplot(x="species",y="petal\_length",data=iris,palette="inferno") → <ipython-input-61-ffe5dd5cf988>:2: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and so sns.boxplot(x="species",y="petal\_length",data=iris,palette="inferno")

<Axes: xlabel='species', ylabel='petal\_length'>

