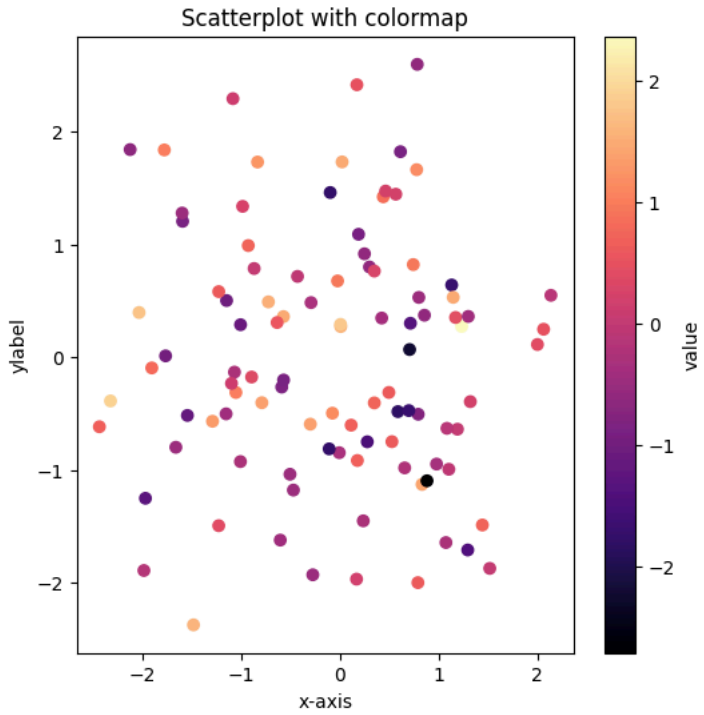
Double-click (or enter) to edit

```
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 0x7aa09f418640>
```




```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
sns.set(rc={"figure.figsize": (6, 6)})
```

```
#building color palettes
current_palette = sns.color_palette()
sns.palplot(current_palette)
```

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

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

```
sample = ["windows blue","amber", "greyish", "faded green", "dusty purple","orange","lavender","olive green"]
sns.palplot(sns.xkcd_palette(sample))
```

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

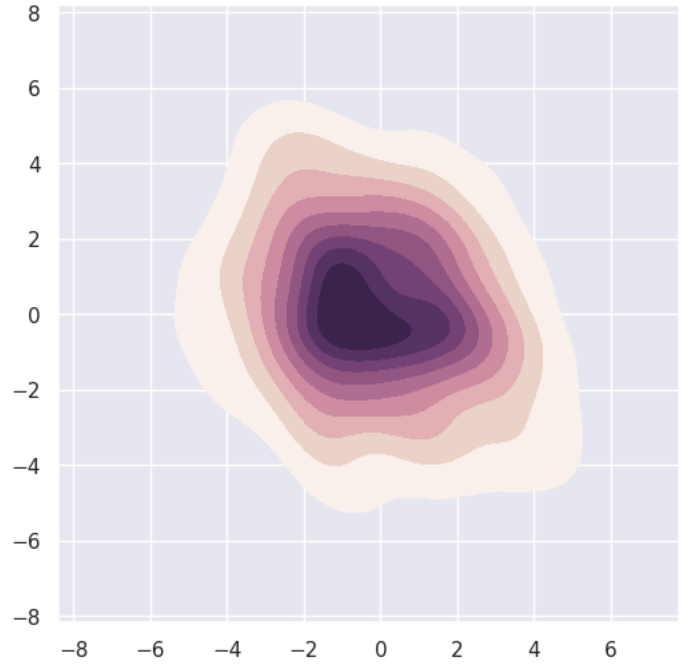
```
sns.palplot(sns.cubehelix_palette(8))
```

```
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-31-ca665d47ab01>:1: RuntimeWarning: covariance is not symmetric positive-semidefinite.
  x,y=np.random.multivariate_normal([0, 0], [[1, -5], [-5, 1]], size=300).T
<ipython-input-31-ca665d47ab01>:3: 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: >
```

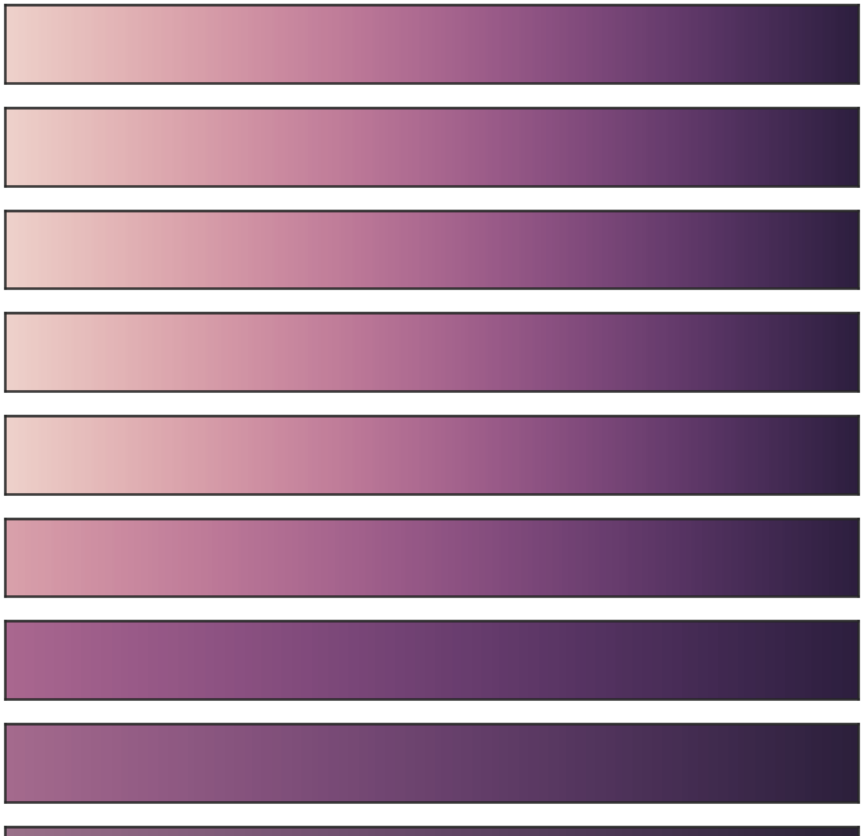



```
sns.choose_cubehelix_palette(as_cmap=True)
```

n_colors 8
start 1.50
rot 0.00
gamma 2.60
hue 0.50
light 0.50
dark 0.15
reverse

interactive

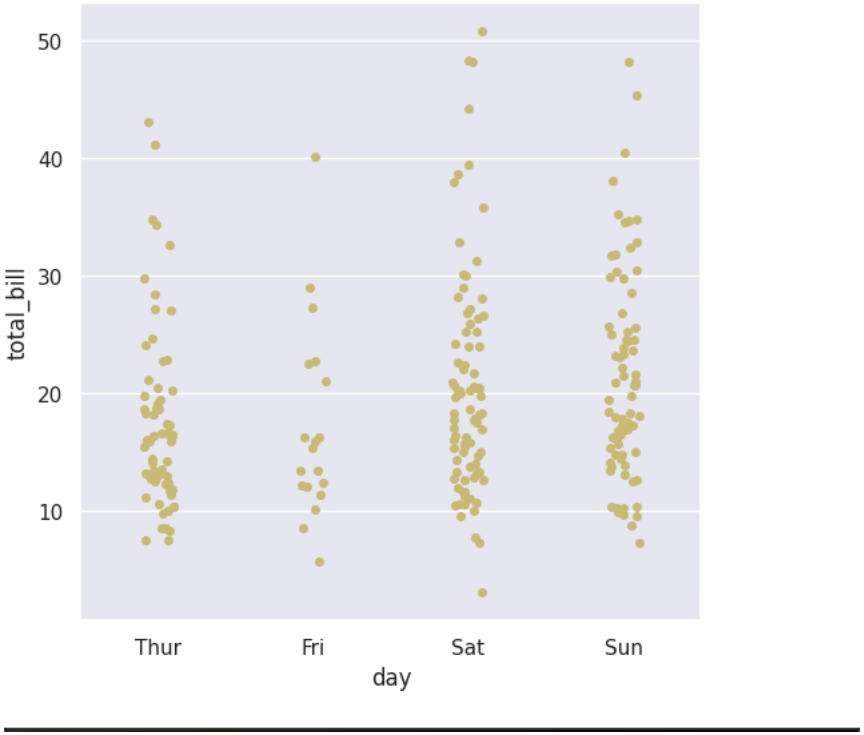
under bad over



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

```
tips=sns.load_dataset("tips")
sns.stripplot(x="day", y="total_bill", data=tips,color="y")
```

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

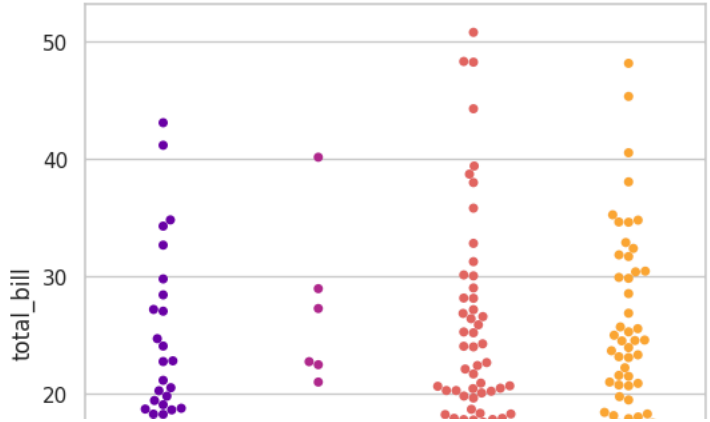



```
sns.set_style('whitegrid')
sns.swarmplot(x="day", y="total_bill", data=tips,palette="plasma")
```

```
<ipython-input-42-8aab53b747ba>: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

  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="inferno")
```

```
<ipython-input-45-ef567c1fa48e>: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

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