```
# Import necessary libraries
import seaborn as sns
import matplotlib.pyplot as plt
# Load iris data
iris = sns.load_dataset("iris")
# Construct iris plot
sns.swarmplot(x="species", y="petal_length", data=iris)
# Show plot
plt.show()
Exercise 2:
sns.distplot(x, hist=False, rug=True);
Exercise 3:
num = np.random.randn(150)
sns.distplot(num)
Exercise 4:
num=np.random.randn(150)
label_dist = pd.Series(num, name = "variable x") sns.distplot(label_dist, color = 'red')
Exercise 5:
sns.jointplot(x='total_bill',y='tip',data=tips,kind='resid')
```

Exercise 1:

```
Exercise 6:
sns.jointplot(x='total_bill',y='tip',data=tips,kind='kde')
Exercise 7:
>>> import numpy as np, pandas as pd; np.random.seed(0)
>>> import seaborn as sns; sns.set(style="white", color_codes=True)
>>> tips = sns.load_dataset("tips")
>>> g = sns.jointplot(x="total_bill", y="tip", data=tips)
Exercise 8:
>>> iris = sns.load_dataset("iris")
>>> g = sns.jointplot("sepal_width", "petal_length", data=iris,
           kind="kde", space=0, color='green')
Exercise 9:
>>> g = (sns.jointplot("sepal_length", "sepal_width",
           data=iris, color="k")
      .plot_joint(sns.kdeplot, zorder=0, n_levels=6))
Exercise 10:
sns.pairplot(iris)
Exercise 11:
sns.pairplot(tips,hue='size',palette='coolwarm') # put hue=size
Exercise 12:
sns.pairplot(iris, hue='species', palette='Blues_d')
Exercise 13:
sns.pairplot(iris, hue='species', palette='Blues_d', markers = ['o', 'D', 's'])
```

Exercise 14:

sns.rugplot(iris['species'])

Exercise 15:

num = np.random.randn(25)#create list

sns.kdeplot(num)#plot it

Exercise 16:

$$mean = [0,0]$$

$$cov = [[0.2, 0], [0, 3]]$$

 x_axis , $y_axis = np.random.multivariate_normal(mean,cov,size=40).T$

sns.kdeplot(x_axis, y_axis)

Exercise 17:

mean = [0,0]

$$cov = [[0.2, 0], [0, 3]]$$

 x_axis , $y_axis = np.random.multivariate_normal(mean,cov,size=40).T$

sns.kdeplot(x_axis, y_axis, n_levels=18, cmap='RdBu')

Exercise 18:

num = np.random.randn(25)#create list

sns.kdeplot(num, bw=1.5)#plot it