

`x_train,x_test,y_train,y_test=train_test_split(X, y, test_size=0.3)`

Given the dataset and the code above, what will be the output for `x_train.shape`, `x_test.shape` ?

- A) (12, 8), (8,)
- B) (14,8) (14,)
- C) (14,) (6, 8)
- D) (14, 8), (6, 8)

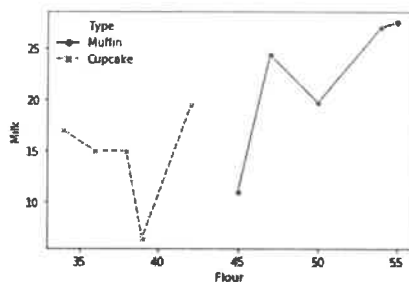
1.8 This module implements several loss, score, and utility functions to measure classification performance of algorithms when applied to data.

- A) sklearn. scores
- B) sklearn. metrics
- C) sklearn.models
- D) sklearn.accuracy

1.9 These types of machine learning algorithms are based on supervised learning and they model target prediction values based on independent variables. They mainly used for finding out the relationship between variables and forecasting.

- A) Decision Trees
- B) Random Forest
- C) Linear Regression
- D) SVM

1.10 What will be the correct coding with parameter listings for the plots below:



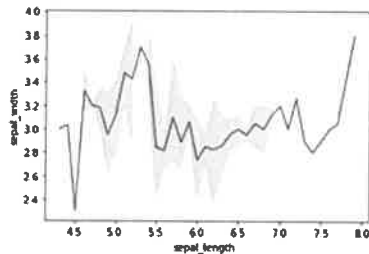
- A) `ax=sns.lineplot(x='Flour',y='Milk',data=raw_data,hue='Type', ci=False, markers=True, style='Type')`
- B) `ax=sns.line(x='Flour',y='Milk',data=raw_data,hue='Type', ci=True, markers=True, style='Type')`
- C) `ax=sns.lineplot(x='Flour',y='Milk',data=raw_data,hue='Type', ci='False', markers=True, 'style'='Type')`
- D) `ax=sns.lineplot(x=Flour,y=Milk,data=raw_data,hue='Type', ci=False, markers=True, style='Type')`

1.11 Given the following code:

```
import seaborn as sns

data = sns.load_dataset("iris")
```

Select the line of code that will plot the graph below:



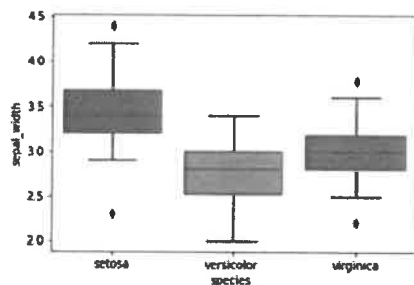
- A. `sns.lineplot(x="sepal_length", y="sepal_width", data=data, hue='Type')`
- B. `sns.lineplot(x="sepal_length", y="sepal_width", data=data, ci="True")`
- C. `sns.lineplot(x="sepal_width", y="sepal_length", data=data)`
- D. `sns.lineplot(x="sepal_length", y="sepal_width", data=data)`

1.12 Given the following code:

```
import seaborn as sns
import matplotlib.pyplot as plt
data = sns.load_dataset("iris")
```

Select the code that will display the plot below:

Output:



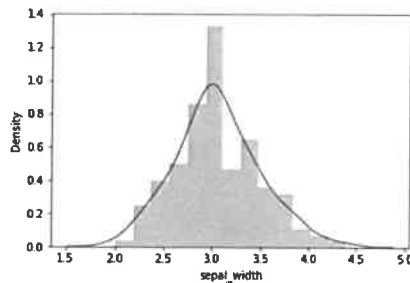
- A) `plt.boxplot(x='species', y='sepal_width', data=data)`
`plt.show()`
- B) `sns.barplot(x=species, y=sepal_width, data=data)`
`plt.show()`
- C) `sns.boxplot(x='species', y='sepal_width', data='data')`
`plt.show()`
- D) `sns.boxplot(x='species', y='sepal_width', data=data)`
`plt.show()`

1.13 Given the code below:

```
import seaborn as sns
import matplotlib.pyplot as plt
data = sns.load_dataset("iris")
```

Select the code that will display the plot below:

Output:



- A) `sns.histplot(data['sepal_width'])`
 - B) `sns.distplot(data['Density'])`
 - C) `sns.distplot(['sepal_width'])`
 - D) `sns.distplot(data['sepal_width'])`
- 1.14 This is a type of bar plot where the X-axis represents the bin ranges while the Y-axis gives information about frequency.
- A) Histogram
 - B) Line Graph
 - C) Scatter Plot
 - D) Bar chart
- 1.15 Colouring different points of a scatter plot can be done through the use of:
- A) `ci`
 - B) `markers`
 - C) `Hue`
 - D) `Matplotlib inline`

(15)