Congratulations! You passed!

Grade received 60% **To pass** 60% or higher

Go to next item

Graded Quiz: Importing Datasets

Latest Submission Grade 60%

1. What does csv stand for? 1 / 1 point

Correct

2. What library is primarily used for machine learning 1 / 1 point

Correct

3. What task does the following command perform? 0 / 1 point

```
2
```

Incorrect

4. Consider the segment of the following dataframe: 0 / 1 point

	symboling	normalized-losses	make	fuel-type	aspiration	num-of-doors	body-style	drive-wheels	engine-location	wheel-base	...	engine-size	fuel-system
0	3	?	alfa-romero	gas	std	two	convertible	rwd	front	88.6	...	130	mpfi
1	3	?	alfa-romero	gas	std	two	convertible	rwd	front	88.6	...	130	mpfi
2	1	?	alfa-romero	gas	std	two	hatchback	rwd	front	94.5	...	152	mpfi
3	2	164	audi	gas	std	four	sedan	fwd	front	99.8	...	109	mpfi
4	2	164	audi	gas	std	four	sedan	4wd	front	99.4	...	136	mpfi

What is the type of the column **make**?

Incorrect

1. What does csv stand for? 1 / 1 point

Correct

2. What library is primarily used for machine learning 1 / 1 point

Correct

3. What task does the following command perform? 0 / 1 point

```
2
```

Incorrect

4. Consider the segment of the following dataframe: 0 / 1 point

	symboling	normalized-losses	make	fuel-type	aspiration	num-of-doors	body-style	drive-wheels	engine-location	wheel-base	...	engine-size	fuel-system
0	3	?	alfa-romero	gas	std	two	convertible	rwd	front	88.6	...	130	mpfi
1	3	?	alfa-romero	gas	std	two	convertible	rwd	front	88.6	...	130	mpfi
2	1	?	alfa-romero	gas	std	two	hatchback	rwd	front	94.5	...	152	mpfi
3	2	164	audi	gas	std	four	sedan	fwd	front	99.8	...	109	mpfi
4	2	164	audi	gas	std	four	sedan	4wd	front	99.4	...	136	mpfi

What is the type of the column **make**?

Incorrect

5. If you use the method **describe()** without changing any of the arguments you will get a statistical summary of all the columns of type object? 1 / 1 point

Correct

Congratulations! You passed!

Grade received 100% **To pass** 60% or higher

Go to next item

Graded Quiz: Data Wrangling

Latest Submission Grade 100%

1. What task do the following lines of code perform? **1 / 1 point**

```
avg=df['horsepower'].mean(axis=0)
df['horsepower'].replace(np.nan, avg)
```

Correct

2. How would you rename column name from **"highway-mpg"** to **"highway-L/100km"**? **1 / 1 point**

Correct

3. How would you cast the column **"losses"** to an integer? **1 / 1 point**

Correct

4. The following code is an example of: **1 / 1 point**

```
(df["length"]-df["length"].mean())/df["length"].std()
```

Correct

5. Consider the two columns 'horsepower', and 'horsepower-binned'; from the dataframe **df**; how many categories are there in the 'horsepower-binned' column? **1 / 1 point**

	horsepower	horsepower-binned
0	111.0	Medium
1	111.0	Medium
2	154.0	Medium

3. How would you cast the column **"losses"** to an integer? 1 / 1 point

Correct

4. The following code is an example of: 1 / 1 point

```
(df["length"]-df["length"].mean())/df["length"].std()
```

Correct

5. Consider the two columns 'horsepower', and 'horsepower-binned'; from the dataframe **df**; how many categories are there in the 'horsepower-binned' column? 1 / 1 point

	horsepower	horsepower-binned
0	111.0	Medium
1	111.0	Medium
2	154.0	Medium
3	102.0	Medium
4	115.0	Medium
5	110.0	Medium
6	110.0	Medium
7	110.0	Medium
8	140.0	Medium
9	101.0	Low
10	101.0	Low
11	121.0	Medium
12	121.0	Medium
13	121.0	Medium
14	182.0	High
15	182.0	High
16	182.0	High
17	48.0	Low
18	70.0	Low
19	70.0	Low

Correct

Congratulations! You passed!

Grade received 100% **To pass** 60% or higher

Go to next item

Graded Quiz: Exploratory Data Analysis

Latest Submission Grade 100%

1. What task does the method **value_counts** perform? 1 / 1 point

Correct

2. What is the largest possible element resulting in the operation **df.corr()**? 1 / 1 point

Correct

3. If the p-value of the Pearson Correlation is 1, then ... 1 / 1 point

Correct

4. Consider the dataframe **df**;what method displays the first five rows of a dataframe? 1 / 1 point

Correct

5. What is the Pearson Correlation between variables X and Y, if X=Y? 1 / 1 point

Correct

Congratulations! You passed!

Grade received 100% **To pass** 60% or higher

Go to next item

Graded Quiz: Model Development

Latest Submission Grade 100%

1. If the predicted function is: **1 / 1 point**

$$\hat{y} = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4$$

The method is:

Correct

2. What steps do the following lines of code perform? **1 / 1 point**

```
Input=[('scale',StandardScaler()),('model',LinearRegression())]

pipe=Pipeline(Input)

pipe.fit(Z,y)

ypipe=pipe.predict(Z)
```

Correct

3. We create a polynomial feature as follows "**PolynomialFeatures(degree=2)**"; what is the order of the polynomial? **1 / 1 point**

Correct

4. What value of **R^2** (coefficient of determination) indicates your model performs best? **1 / 1 point**

Correct

$$\hat{y} = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4$$

The method is:

Correct

2. What steps do the following lines of code perform? 1 / 1 point

```
Input=[('scale',StandardScaler()),('model',LinearRegression())]

pipe=Pipeline(Input)

pipe.fit(Z,y)

ypipe=pipe.predict(Z)
```

Correct

3. We create a polynomial feature as follows "**PolynomialFeatures(degree=2)**"; what is the order of the polynomial? 1 / 1 point

Correct

4. What value of **R^2** (coefficient of determination) indicates your model performs best? 1 / 1 point

Correct

5. Consider the following equation: 1 / 1 point

$$y = b_0 + b_1 x$$

What is the parameter **b_0** (b subscript 0)?

Correct

Congratulations! You passed!

Grade received 80% **To pass** 80% or higher

Go to next item

Graded Quiz: Model Refinement

Latest Submission Grade 80%

1. What is the output of the following code? **0 / 1 point**

```
1  cross_val_predict (lr2e, x_data, y_data, cv=3)
```

Incorrect

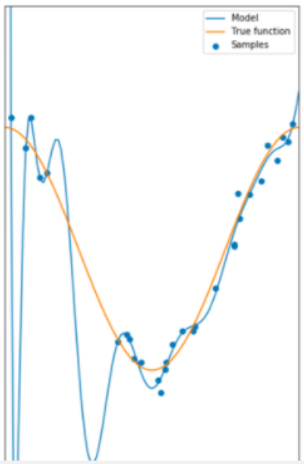
2. What dictionary value would we use to perform a grid search to determine if normalization should be used and for testing the following values of alpha? 1,10, 100 **1 / 1 point**

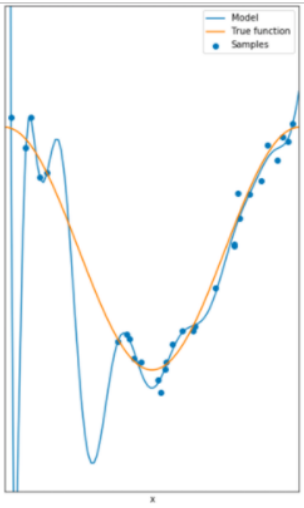
Correct

3. You train a ridge regression model, you get a R^2 of 1 on your training data and you get a R^2 of 0 on your validation data; what should you do? **1 / 1 point**

Correct

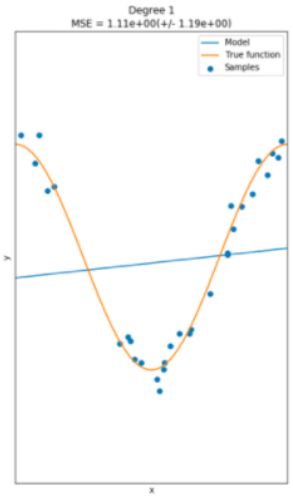
4. The following is an example of what? **1 / 1 point**





Correct

5. The following is an example of what? 1 / 1 point



Correct

Congratulations! You passed!

Grade received 83.33% **To pass** 80% or higher

Go to next item

Final Exam

Latest Submission Grade 83.33%

1. What type of file allows data to be saved in a tabular format? **1 / 1 point**

- (•) csv
- ( ) html
- ( ) pdf

Correct

2. What Python library is used forfast array processing? **1 / 1 point**

- (•) Numpy
- ( ) Matplotlib
- ( ) Scikit-learn

Correct

3. What path tells us where the data is stored? **1 / 1 point**

- ( ) Scheme path
- ( ) Encoding path
- (•) File path

Correct

4. What does the tail() method return? **0 / 1 point**

- (•) It returns the data types of each column
- ( ) It returns the first five rows

4. What does the tail() method return? **0 / 1 point**

- (●) It returns the data types of each column
- ( ) It returns the first five rows
- ( ) It returns the last five rows

Incorrect

5. In a dataset what is the name of the columns? **1 / 1 point**

- ( ) Type
- ( ) Row
- (●) Header

Correct

6. The Scikit-learning library is mostly used for what? **1 / 1 point**

- (●) Machine learning
- ( ) Data visualization
- ( ) Data analysis

Correct

7. What would the following code segment output from a dataframe **df**? **1 / 1 point**

```
df.tail(10)
```

- ( ) It would return the first 10 rows of the dataframe
- ( ) It would return all of the rows of the dataframe
- (●) It would return the last 10 rows of the dataframe

Correct

8. What is the function used to remove rows and columns with Null or NaN values? **0 / 1 point**

- (●) removena()
- ( ) dropna()
- ( ) replacena()

Incorrect

9. What does the following code segment perform in a dataframe? **1 / 1 point**

```
df["a"]=2*df["a"]
```

- ( ) It assigns **2*df["a"]** back to column **df["a"]**
- ( ) A: It multiplies each element in the column **df["a"]** by 2
- (●) It multiplies each element in the column **df["a"]** by 2 and assigns it back to column **df["a"]**

Correct

10. What function returns the maximum of the values requested for the requested column? **1 / 1 point**

- (●) max()
- ( ) min()
- ( ) std()

Correct

11. Consider the following image: what is the name of the operation that transformed the column fuel into quantitative variables? **1 / 1 point**

10. What function returns the maximum of the values requested for the requested column? **1 / 1 point**

- (●) max()
- ( ) min()
- ( ) std()

Correct

11. Consider the following image: what is the name of the operation that transformed the column fuel into quantitative variables? **1 / 1 point**

fuel
gas
diesel
gas
gas

gas	diesel
1	0
0	1
1	0
1	0

- ( ) Data standardization
- (●) One-hot encoding

Correct

12. What task does the following line of code perform? **1 / 1 point**

```
df['peak-rpm'].replace(np.nan, 5,inplace=True)
```

- ( ) rename the column 'peak-rpm' to 5
- ( ) add 5 to the dataframe **df**
- (●) replace the not a number values with 5 in the column 'peak-rpm'

Correct