

Congratulations! You passed!  
Grade received 83.33%  
To pass 80% or higher  
Go to next item

1. Which of the following statements is true? Select all that apply.

0.75 / 1 point

- ☒ One hot encoding is a data transformation technique.
- ☒ Correct  
One hot encoding is a data transformation technique that allows data professionals to turn one categorical variable into several binary variables.
- ☒ One hot encoding is a categorical transformation technique.
- ☒ This should not be selected  
One hot encoding is a data transformation technique that allows data professionals to turn one categorical variable into several binary variables.
- ☐ One hot encoding allows data professionals to turn several categorical variables into one binary variable.
- ☒ One hot encoding allows data professionals to turn one categorical variable into several binary variables.
- ☒ Correct  
One hot encoding is a data transformation technique that allows data professionals to turn one categorical variable into several binary variables.

2. What is the definition of the no multicollinearity assumption?

1 / 1 point

- ☐ No variation of the residential can be constant or similar across the model.
- ☐ No observation in the dataset can be independent.
- ☒ No two independent variables can be highly correlated with each other.
- ☐ No predictor variable can be linearly related to the outcome variable.
- ☒ Correct  
Multicollinearity states that no two independent variables can be highly correlated with each other. This means that  $X_i$  and  $X_j$  cannot be linearly related.

3. In what ways might a data professional handle data with multicollinearity? Select all that apply.

0.75 / 1 point

- ☒ Create new variables using existing data.
- ☒ Correct  
A data professional might handle data with multicollinearity by dropping one or more variables that have high multicollinearity. They might also create new variables using existing data.

☒ Drop one or more variables that have high multicollinearity.

☒ Correct

A data professional might handle data with multicollinearity by dropping one or more variables that have high multicollinearity. They might also create new variables using existing data.

☐ Turn one categorical variable into several binary variables.

☒ Square the variables that have high multicollinearity.

☒ This should not be selected

A data professional might handle data with multicollinearity by dropping one or more variables that have high multicollinearity. They might also create new variables using existing data.