
EECS16ML: Quiz Solutions

1. C) Pandas Aggregation methods such as `.count()` and `.sum()` are much more efficient, as well as readable and easier to document.
2. B) In terms of efficient documentation of helper functions, function names should be lowercase and separated with underscores for good readability.
3. To complete this task, we can import `pdpipeline` library and use `pdpipeline.OneHotEncode()` on the column specified. This creates a reusable block that can be applied on other categorical variable as well.
4. A) and D) These options would lead to a better representation of the correlation more aligned with the unity line.
5. When working with documentation for methods, it should emphasize why the function is there, not how it works. We know how it works by quickly examining the code, but explaining why the function exists and where it could be applied is the most important aspect of documenting code.
6. A) Bar plots are appropriate to visualize the amounts in each category.
7. B) Box plots give very useful info about the numerical distribution of variables, including lower and upper quartiles as well as outliers.
8. C) A heatmap allows us to visualize a colored map of intensities based on the magnitude of the numerical values.
9. C) `df.dropna(axis=1)` specifies that any null values on the axis 1, which is the column axis, should be dropped.
10. The `TokenizeWords()` method tokenizes a sentence into a list of tokens by whitespaces, allowing easy extraction of zip codes.