How to write documentation

Any time you hand in a lab in this class, you'll be expected not only to comment your code well, but also to provide accompanying documentation. The documentation should always include the answers to the questions below (though you needn't answer all questions separately, it may be that answers to some questions also answer others - the questions to consider are given to guide your descriptions to completeness).

How do you run the code? Give a detailed example, including the paths to any files, the expected parameters, and the expected output.

Describe the problem that you're solving.
- How does the algorithm address that problem?

What assumptions need to hold for this function / set of functions to work correctly?
This might include: What have you assumed about...
- the data input format?
- how missing data is handled?
- how outliers are handled?
- the quality and generalizability of the data?
- what attributes were included in your data and what attributes weren't?

Describe your algorithm.
- How does your algorithm work? Explain this so that someone who is not in this class could understand.
- What will happen to the output if the above input assumptions are not met?

Describe the output to your algorithm.
- What is the expected output for a normal input?
- What is the expected output for a data point outlier?
- Explain why the output is correct.