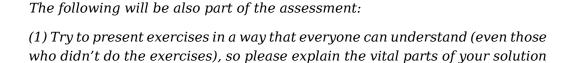
Informatics for Astronomers - WS2019

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Exercise sheet 1 - Basics

in a clear way.



(2) Try to also include some background information where applicable, and/or explain the possible context/motivation for the given exercise.

- 1. Take the string (a sequence of characters) "abracadabra". Calculate it's entropy.
- 2. Look up the different classifications for state-machines. How do they differ?
- 3. Explain the difference between an interpreted and a compiled programming language.
- 4. What does the python "Global Interpreter Lock" do and why is it needed. What are its drawbacks.
- 5. Explain binary and hexadecimal representation of bytes. Show the correspondence for a character and explain the differences of each system.