Week 1 Quiz 2

1. Based on the examples shown in the videos, which of the following processes is an LLM MOST likely to struggle with?

   - Understanding and responding to requests that involved multiple pieces of code, like a configuration file and the source code that uses it
   - Understanding a series of prompts that iteratively update the same piece of code
   - Altering a piece of software to implement a specific design paradigm (for example, configuration driven development)
   - Writing code that uses an API that has received recent and frequent updates

   If API changes are quite recent some LLMs may lack access to that information in their training data and will be unable to write code that properly uses the most recently released versions.

2. Which of the following is LEAST appropriate to include in the configuration file for the DALL-E app built in the videos, using the CDD design paradigm?

   - A setting that determines the number of images to be generated by the call to the DALL-E API
   - A setting that stores the prompt to be given to the DALL-E API to generate the images
   - A setting that stores the code of a function to be called to process images once they've been generated
   - A setting that stores an API key to be used to call the DALL-E API

   Source code like this doesn't belong in a configuration file

3. What benefit did using pickle to serialize the configuration file and resulting images provide?

   - Pickling these objects together prevents any potential security breaches in the application
   - Pickling these objects together shrinks the total size of the files
   - Pickling these objects together converts them to a format that can easily be stored, transferred, and reconstructed later
   - Pickling these objects together converts both of them to JSON

   This is the primary purpose of pickling pieces of information in a program.

4. In the videos the LLM initially did not include every parameter of the DALL-E API in the configuration file and the source code that used it. After re-prompting the LLM, it added these settings to the code that it had generated. Which prompting best practice did this interaction best exhibit.

   - Be specific
   - Assign a role

- Request an expert opinion
- Give feedback

Iteratively prompting an LLM and giving feedback on the responses it has already generated is an important practice when working with an LLM and the one best exhibited by this interaction.

5. Which of the following design choices are you MOST likely to implement when building an application following the configuration driven development design paradigm?
   - Hard-coding settings in source code to ensure they can't be mistakenly reconfigured
   - Designing source code to ingest external configuration files that store important settings that affect how the software runs
   - Writing multiple versions of source code that each align with a common set of configuration settings
   - Serializing the output of an application to ensure it can be stored and accessed later

   The use of external configuration files is the primary feature of a CDD approach.