The Machine Learning Project Lifecycle

1. Which of these are stages of the machine learning project lifecycle? Check all that apply.

   - Scoping
   - Data
   - Configuration
   - Modeling
   - Deployment

2. Which of these is not an advantage of a typical edge deployment compared to a typical cloud deployment?

   - More computational power available
   - Lower latency
   - Less network bandwidth needed
   - Can function even if network connection is down

Edge deployments are frequently constrained in computational power due to cost, size, and energy requirements of the hardware.

3. In the speech recognition example, what is the problem with some labellers transcribing audio as "Um, today's weather" and others transcribing "Umm..., today's weather"?

   - The first is grammatically incorrect and we should use the second transcription.
   - Either transcription is okay, but the inconsistency is problematic.
   - We should not be transcribing "Umm." The correct transcription, which serves the user's needs better, is just "Today's weather".
   - The second is grammatically incorrect and we should use the first transcription.

The labelling instructions should remove ambiguity such that every example is labelled consistently.

4. After a system is deployed, monitoring and maintaining the system will help us handle any cases of concept drift or data drift.

   - True
   - False

The last step of the machine learning project lifecycle is monitoring and maintenance, which is necessary because your project's use cases and data may change over time!

5. Which statement is a more accurate description of the full cycle of a machine learning project?

   - It is a linear process, in which we move step-by-step from scoping to deployment. (That's why we call it a cycle. Bicycles are only good at going forward, not backward.)
   - It is an iterative process, where during a later stage we might go back to an earlier stage. (That's why we call it a cycle--it's a circular process.)