Quiz 1 - Machine Learning Overview

1. What is NOT machine learning?

- Learning from data
- **Explicit, step-by-step programming**
- Data-driven decisions
- Discover hidden patterns

2. Which of the following is NOT a category of machine learning?

- Cluster Analysis
- Classification
- Regression
- Association Analysis
- **Algorithm Prediction**

3. Which categories of machine learning techniques are supervised?

- **classification and regression**
- regression and association analysis
- classification and cluster analysis
- cluster analysis and association analysis

4. In unsupervised approaches,

- the target is unlabeled.
- **the target is unknown or unavailable.**
- the target is provided.
- the target is what is being predicted.

5. What is the sequence of the steps in the machine learning process?

- **Acquire -> Prepare -> Analyze -> Report -> Act**
- Acquire -> Prepare -> Analyze -> Act -> Report
- Prepare -> Acquire -> Analyze -> Report -> Act
- Prepare -> Acquire -> Analyze -> Act -> Report

6. Are the steps in the machine learning process apply-once or iterative?

- Apply-once
- **Iterative**
- The first two steps, Acquire and Prepare, are apply-once, and the other steps are iterative.

7. Phase 2 of CRISP-DM is Data Understanding. In this phase,

- we acquire as well as explore the data that is related to the problem.
- we define the problem or opportunity to be addressed.
- we prepare the data for analysis.

8. What is the main difference between KNIME and Spark MLlib?

- KNIME requires programming, while Spark MLlib does not.
- KNIME requires programming in Java, while Spark MLlib requires programming in Python.
- **KNIME is a graphical user interface-based machine learning tool, while Spark MLlib provides a programming-based distributed platform for scalable machine learning algorithms.**
- KNIME originated in Germany, while Spark MLlib was created in California, USA.