Week 3 Quiz

1. Which of the following statements best differentiates DataOps observability from DevOps observability? DataOps observability focuses on monitoring the accuracy of data, while
    - DevOps observability focuses on ensuing that the data is discoverable.
    - DataOps observability focuses on monitoring the health of data through data quality metrics, while DevOps observability focuses on monitoring the health of systems through system performance metrics.
    - DataOps observability relies solely on manual data checks, while DevOps observability uses tools developed specifically for software applications.

2. According to this week's videos, why is it important to communicate with source system owners in the context of data observability and monitoring?
    - To anticipate and mitigate potential changes in data that might affect its quality.
    - To eliminate the need for monitoring data freshness and accuracy.
    - To reduce the reliance on data quality testing tools like Great Expectations.

3. True or False: It is a best practice to monitor every aspect of your data to ensure that the data is high quality for many stakeholders.
    - True
    - False

4. Which of the following statements is/are true about version control within DataOps?
    - With version control, you can track changes in your code and your data.
    - With version control, you can track changes in your infrastructure.
    - With version control, you cannot roll back to a previous version of the infrastructure.
    - With version control, you can roll back to a previous version of the data.

5. Other than Terraform, what other infrastructure as code tools were mentioned in this week's videos?
    - Ansible
    - AWS CloudFormation
    - Bash
    - Airflow

6. Which of the following statements is true about Terraform?
    - If you repeatedly run a Terraform configuration file that creates two EC2 instances, then you will create two new EC2 instances each time, regardless of whether they already exist.
    - You write the Terraform configuration files in Python.
    - You can use Terraform to create only AWS resources. You cannot provision resources from other cloud providers.
    - With Terraform, you use a declarative language to specify the desired end-state of the infrastructure.

7. Which of the following statements is TRUE about the use of Infrastructure as Code in cloud infrastructure management?
    - Infrastructure as Code helps you automatically run your data pipelines.
    - Infrastructure as Code allows for the automation of new code testing using code-based testing files.
    - Infrastructure as Code allows for the automatic creation of python scripts used to ingest and transform your data.
    - Infrastructure as Code allows for the automation of resource provisioning using code-based configuration files.

8. According to this week's videos, which of the following is/are data quality metrics you could monitor? Select all that apply.
    - The freshness of data
    - The range of values in a particular column
    - The number of null values
    - RAM consumption
    - CPU utilization