First and last name .....

Question 1/30

What is ML-Flow?

A. A Python library for machine learning models
B. An open-source platform for managing the end-to-end machine learning lifecycle
C. A cloud-based machine learning service provided by Google
D. A programming language for data science

Question 2/30

Which of the following components is part of ML-Flow?

A. TensorFlow
B. Jupyter Notebook
C. Tracking, Projects, Models
D. PyTorch

Question 3/30

ML-Flow's Tracking component is used for:

A. Managing code versions
B. Logging and organizing experiments
C. Deploying machine learning models
D. Generating synthetic data

Question 4/30

What is the purpose of ML-Flow Projects?

A. Managing cloud infrastructure
B. Packaging and reproducing machine learning code
C. Visualizing data pipelines
D. Optimizing hyperparameters

Question 5/30

What is ML-Ops?

A. Machine Learning Optimization Techniques
B. Mobile Learning Operations
C. DevOps practices applied to machine learning
D. A programming language for machine learning algorithms

Question 6/30

Which of the following is NOT a key aspect of ML-Ops?

A. Continuous Integration
B. Continuous Deployment
C. Reinforcement Learning
D. Model Monitoring

Question 7/30

What is the main goal of ML-Ops?

A. Building machine learning models
B. Training neural networks
C. Streamlining the machine learning lifecycle
D. Data visualization

Question 8/30

Which stage of the machine learning lifecycle does ML-Ops primarily focus on? (Choose the most relevant answer)

A. Deployment and Monitoring
B. Data Preprocessing
C. Model Training
D. Model Evaluation

Question 9/30

What is Azure Virtual Machines (VMs) used for?

A. Deploying serverless functions
B. Running virtualized Windows or Linux servers in the cloud
C. Managing databases
D. Storing and analyzing big data

Question 10/30

Which Azure service is used for deploying and managing containers?

A. Azure Functions
B. Azure Blob Storage
C. Azure Container Apps
D. Azure Cosmos DB

Question 11/30

What is the purpose of Azure Container Apps?

A. Deploying virtual machines
B. Running containers without managing servers
C. Managing cloud networks
D. Building machine learning models

Question 12/30

Which of the following is a benefit of using Azure VM Scale Sets?

A. Automatic scaling of container instances
B. Running containers without server management
C. Automatically scaling virtual machines based on demand
D. Real-time data streaming

Question 13/30

What is ZenML?

A. A programming language for machine learning
B. An open-source MLOps framework
C. A cloud-based machine learning platform
D. A deep learning library

Question 14/30

Which of the following tasks can be performed using ZenML?

A. Building neural networks
B. Orchestrating machine learning pipelines
C. Managing virtual machines
D. Analyzing big data

Question 15/30

What does ZenML focus on in the machine learning lifecycle?

A. Model Training
B. Data Visualization
C. End-to-End Pipeline Orchestration
D. Model Deployment

Question 16/30

Which programming language is primarily used with ZenML?

A. Java
B. Python
C. R
D. JavaScript

Question 17/30

What is Apache Airflow?

A. A machine learning framework
B. An open-source platform for orchestrating complex workflows
C. A cloud-based storage service
D. A programming language for data analysis

Question 18/30

What is the primary concept in Apache Airflow for defining workflows?

A. Recipes
B. Directed Acyclic Graphs (DAGs)
C. Pipelines
D. Flowcharts

Question 19/30

Which component of Apache Airflow is responsible for executing tasks?

A. Scheduler
B. Executor
C. Operator
D. Worker

Question 20/30

How does Apache Airflow represent a workflow?

A. With flowcharts
B. Using Python code defining Directed Acyclic Graphs (DAGs)
C. Through JSON files
D. With SQL queries

Question 21/30

What is the purpose of the airflow.cfg file in Apache Airflow?

A. Defining DAGs
B. Configuring Airflow settings and options
C. Storing metadata
D. Defining task dependencies

Question 22/30

Which of the following is NOT an Apache Airflow component?

A. A) Scheduler
B. B) Worker
C. C) Data Lake
D. D) Executor

Question 23/30

How can you trigger a DAG manually in Apache Airflow?

A. A) By restarting the Airflow web server
B. B) By updating the airflow.cfg file
C. C) By clicking the "Trigger DAG" button in the Airflow web interface
D. D) By running a SQL query directly on the metadata database

Question 24/30

What does an Operator do in Apache Airflow?

A. A) Schedules tasks
B. B) Executes Python code
C. C) Defines a single task in a DAG
D. D) Manages worker nodes

Question 25/30

Which component of Apache Airflow is responsible for pulling tasks from the queue and executing them?

A. A) Scheduler
B. B) Web server
C. C) Worker
D. D) Executor

Question 26/30

Which command is used to list available DAGs in Apache Airflow?

A. A) airflow list
B. B) airflow show
C. C) airflow dags list
D. D) airflow show_dags

Question 27/30

How does Apache Airflow handle task dependencies?

A. A) By using Directed Acyclic Graphs (DAGs) to define dependencies between tasks
B. B) By using machine learning algorithms to predict dependencies
C. C) By randomly assigning dependencies at runtime
D. D) By using a centralized dependency management system

Question 28/30

Which of the following is NOT a valid Airflow Executor type?

A. A) GPUExecutor
B. B) SequentialExecutor
C. C) LocalExecutor
D. D) CeleryExecutor

Question 29/30

How does Apache Airflow handle task retries?

A. A) By rerunning the entire DAG
B. B) By re-executing the failed task up to a specified number of times
C. C) By skipping the failed task and continuing with the next one
D. D) By notifying the administrator via email

Question 30/30

Which component of Apache Airflow is responsible for managing the Airflow web interface?

A. A) Web server
B. B) Scheduler
C. C) Worker
D. D) Executor