



First and last name

Question 1/35 (5 p.)

Which module in Python is used for interacting with the operating system?

- A. sys
- B. os
- C. io
- D. os.path
- E. All of the above

Question 2/35 (5 p.)

What command is used to create a virtual environment in Python?

- A. python -m venv
- B. pip install virtualenv
- C. pipenv shell
- D. conda create -n
- E. All of the above

Question 3/35 (5 p.)

What is used to automate shell commands on Unix-like systems?

- A. Cron
- B. Task Scheduler
- C. systemd
- D. batch files
- E. None of the above

Question 4/35 (5 p.)

In FastAPI, what is used to define RESTful endpoints?

- A. URL patterns
- B. Decorators
- C. Classes
- D. Functions
- E. Modules

Question 5/35 (5 p.)

Which database management tool is commonly used for PostgreSQL?

- A. pgAdmin
- B. MySQL Workbench
- C. SQLite Browser
- D. SQL Alchemy
- E. None of the Above



Question 6/35 (5 p.)

What is used to establish a secure connection to a cloud server? (Please answer in context of what's used in the course)

- A. FTP
- B. SSH
- C. RDP
- D. Telnet
- E. SCP

Question 7/35 (5 p.)

What does DNS stand for?

- A. Data Network Server
- B. Domain Name System
- C. Dynamic Network Server
- D. Distributed Network Service
- E. None of the Above

Question 8/35 (5 p.)

How does DNS function?

- A. Resolving IP addresses to domain names
- B. Resolving domain names to IP addresses
- C. Assigning domain names
- D. Registering domain names
- E. None of the Above

Question 9/35 (5 p.)

How can you access RESTful endpoints for testing?

- A. Using a web browser
- B. Using cURL commands
- C. Using Postman
- D. Using Python requests library
- E. All of the above

Question 10/35 (5 p.)

What is used to install the Nginx web server on an Ubuntu virtual machine?

- A. yum install nginx
- B. brew install nginx
- C. apt install nginx
- D. None of the above
- E. pip install nginx



Question 11/35 (5 p.)

Which command is used to start the Nginx service?

- A. systemctl start nginx
- B. service nginx start
- C. start nginx
- D. sudo start nginx
- E. None of the Above

Question 12/35 (5 p.)

How can you install the Python OS module?

- A. pip install os
- B. pip install python-os
- C. No need to install, it's part of Python standard library
- D. apt install python-os
- E. None of the above

Question 13/35 (5 p.)

Which tool is used for managing scheduled tasks on Unix-like systems?

- A. crontab
- B. cronjob
- C. cronmanager
- D. croncontrol
- E. None of the above

Question 14/35 (5 p.)

What is the main purpose of FastAPI?

- A. To deploy cloud services
- B. To develop machine learning models
- C. To predict results from a ML model based on given inputs
- D. None of the Above
- E. To build APIs quickly

Question 15/35 (5 p.)

Which SSH command is used to connect to a remote server?

- A. ssh connect@user
- B. ssh remote
- C. ssh server
- D. ssh username@hostname
- E. None of the above



Question 16/35 (5 p.)

Which cloud provider offers virtual machines for deployment?

- A. Amazon Web Services (AWS)
- B. Google Cloud Platform (GCP)
- C. Microsoft Azure
- D. All of the above
- E. None of the above

Question 17/35 (5 p.)

What is the purpose of Nginx in a web server setup?

- A. Load balancing
- B. Reverse proxy
- C. Serving static files
- D. All of the above
- E. None of the Above

Question 18/35 (5 p.)

What does the following Python code snippet do?

```
import os  
  
current_dir = os.getcwd()
```

- A. Changes the current directory to the root directory
- B. Retrieves the current working directory
- C. Creates a new directory
- D. Deletes the current directory
- E. None of the Above

Question 19/35 (5 p.)

Which Python os method is used to remove a directory?

- A. os.remove()
- B. os.delete()
- C. os.rmdir()
- D. os.unlink()
- E. None of the Above



Question 20/35 (5 p.)

How would you activate a Python virtual environment named "myenv" using the terminal on an Ubuntu based cloud VM ?

- A. activate myenv
- B. virtualenv activate myenv
- C. source myenv/bin/activate
- D. python -m myenv activate
- E. None

Question 21/35 (5 p.)

When choosing a region to minimize latency in cloud computing, what factor should be of primary concern? (Choose the most relevant answer keeping in mind that reducing latency is the goal)

- A. Cost
- B. Security
- C. Availability
- D. Compliance
- E. None of the Above

Question 22/35 (5 p.)

What HTTP method is typically used to retrieve data from a server in a RESTful API?

- A. GET
- B. POST
- C. PUT
- D. PATCH
- E. HEAD

Question 23/35 (5 p.)

In a RESTful API, what HTTP method is used for updating existing data?

- A. GET
- B. PUT
- C. POST
- D. DELETE
- E. HEAD

Question 24/35 (5 p.)

Which HTTP method is used for making partial updates to existing resources in a RESTful API?

- A. PATCH
- B. PUT
- C. POST
- D. GET
- E. DELETE



Question 25/35 (5 p.)

What is the purpose of the requirements.txt file in a Python project?

- A. To store user authentication credentials
- B. To list all the required dependencies for the project
- C. To define the project's version control information
- D. To specify the project's licensing information
- E. None of the Above

Question 26/35 (5 p.)

What does MLOps stand for?

- A. Machine Learning Optimization
- B. Machine Learning Operations
- C. Model Learning Operations
- D. Model Lifecycle Operations
- E. None of the Above

Question 27/35 (5 p.)

What is the primary purpose of data version control in MLOps?

- A. Tracking changes to machine learning models
- B. Managing different versions of datasets
- C. Optimizing machine learning algorithms
- D. Monitoring model performance
- E. All of the above

Question 28/35 (5 p.)

Which of the following best describes the Machine Learning Operations Maturity Model ?

- A. A framework for evaluating the performance of machine learning models
- B. A measure of the maturity level of an organization's MLOps capabilities
- C. A library of machine learning algorithms
- D. A set of best practices for developing machine learning models
- E. None of the Above

Question 29/35 (5 p.)

What is experiment tracking in the context of MLOps?

- A. Tracking the progress of machine learning experiments
- B. Monitoring the performance of deployed machine learning models
- C. Versioning datasets used in machine learning experiments
- D. Optimizing hyperparameters of machine learning models
- E. None of the above



Question 30/35 (5 p.)

Which of the following is a benefit of model versioning in MLOps?

- A. Ensuring reproducibility of machine learning experiments
- B. Tracking changes to the codebase of machine learning models
- C. Optimizing hyperparameters of machine learning models
- D. All of the above
- E. None of the above

Question 31/35 (5 p.)

What is data drift in the context of machine learning?

- A. Changes in the underlying distribution of the input data over time
- B. Changes in the performance metrics of machine learning models
- C. Changes in the hyperparameters of machine learning models
- D. None of the above
- E. All of the above

Question 32/35 (5 p.)

What is Docker?

- A. A version control system
- B. A containerization platform
- C. A machine learning library
- D. A data visualization tool
- E. All of the above

Question 33/35 (5 p.)

What is the role of Git in MLOps?

- A. Managing Docker containers
- B. Version control for machine learning models and associated application code and APIs
- C. Experiment tracking
- D. Model Deployment
- E. All of the above

Question 34/35 (5 p.)

What is the purpose of the .gitignore file in a Git repository?

- A. To specify which files and directories should be ignored by Git
- B. To store user authentication credentials
- C. To define the project's licensing information
- D. To specify the project's dependencies
- E. None of the above



Question 35/35 (5 p.)

What does the following Git command do ?

```
git commit -m "Update README.md"
```

- A. Pushes changes to a remote repository
- B. Adds all changes to the staging area
- C. Commits staged changes with the specified message
- D. Creates a new branch named "Update README.md"
- E. None of the above