

ប្រលងបញ្ចប់មុខវិជ្ជា DevOps (B2)

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1. Which command is used to list all files, including hidden ones, in Unix?
 - A. ls -l
 - B. ls -a
 - C. ls -lh
 - D. ls -r

Difficulty Level: EASY

Reference: <https://man7.org/linux/man-pages/man1/ls.1.html>

2. What does the ssh command stand for?
 - A. Secure Socket Host
 - B. Simple Secure Host
 - C. Secure Shell
 - D. Socket Shell

Difficulty Level: EASY

Reference: <https://www.man7.org/linux/man-pages/man1/ssh.1.html>

3. How can you check the current branch in a Git repository?
 - A. git branch
 - B. git status
 - C. git log
 - D. git checkout

Difficulty Level: EASY

Reference: <https://man7.org/linux/man-pages/man1/git.1.html>

4. In Docker, which command is used to list all running containers?
 - A. docker ps
 - B. docker images
 - C. docker run
 - D. docker container ls

Difficulty Level: EASY

Reference: <https://docs.docker.com/reference/cli/docker/container/ls/>

5. What does CI/CD stand for in DevOps?
- A. Continuous Integration/Continuous Deployment
 - B. Continuous Improvement/Continuous Delivery
 - C. Continuous Integration/Consistent Delivery
 - D. Code Integration/Continuous Deployment

Difficulty Level: EASY

Reference: <https://about.gitlab.com/solutions/continuous-integration/>

6. Which of the following tools is primarily used for configuration management?
- A. Jenkins
 - B. Ansible
 - C. Docker
 - D. Kubernetes

Difficulty Level: EASY

Reference: <https://www.ansible.com/how-ansible-works/>

7. What is the purpose of a Load Balancer in a DevOps environment?
- A. To distribute incoming network traffic evenly across servers
 - B. To store backup data
 - C. To encrypt data in transit
 - D. To handle CI/CD pipelines

Difficulty Level: EASY

Reference: <https://www.cloudflare.com/learning/performance/what-is-load-balancing/>

8. Which of the following tools is primarily used for alternative container management?
- A. GitLab
 - B. Jenkins
 - C. Portainer
 - D. Nagios

Difficulty Level: EASY

Reference: <https://www.portainer.io/>

9. What is the purpose of the Dockerfile?
- A. To store Docker images
 - B. To automate the creation of Docker containers
 - C. To build Docker images
 - D. To manage Docker networks

Difficulty Level: MEDIUM

Reference: <https://docs.docker.com/reference/dockerfile/>

10. How can you emulate AWS services locally using LocalStack?

- A. Using `aws-local`
- B. Using `docker-compose up`
- C. Using `localstack start`
- D. Using `localstack deploy`

Difficulty Level: MEDIUM

Reference: <https://docs.localstack.cloud/getting-started/quickstart/>

11. Which of the following commands shows all Terraform state information?

- A. `terraform show`
- B. `terraform list`
- C. `terraform state`
- D. `terraform init`

Difficulty Level: MEDIUM

Reference: <https://developer.hashicorp.com/terraform/cli/commands/show>

12. In GitHub Actions, how do you define environment variables?

- A. Using `env.yml`
- B. Using `.github-env`
- C. Using `env` key in the workflow YAML
- D. Using a `.gitignore` file

Difficulty Level: MEDIUM

Reference: <https://docs.github.com/en/actions/writing-workflows/choosing-what-your-workflow-does/store-information-in-variables>

13. What does the Ansible ping module do?

- A. Checks if the remote host is reachable
- B. Pings a network to check connectivity
- C. Runs all tasks defined in a playbook
- D. Updates the remote server

Difficulty Level: MEDIUM

Reference:

https://docs.ansible.com/ansible/latest/collections/ansible/builtin/ping_module.html

14. Which command is used to build and tag a Docker image?

- A. `docker build -t <image-name>`
- B. `docker create -t <image-name>`
- C. `docker tag <image-name>`
- D. `docker run -t <image-name>`

Difficulty Level: MEDIUM

Reference: <https://docs.docker.com/build/>

15. What flag would you use with ssh to specify a different port than the default?

- A. `-p`
- B. `-i`
- C. `-P`
- D. `-port`

Difficulty Level: MEDIUM

Reference: <https://www.man7.org/linux/man-pages/man1/ssh.1.html>

16. While working with Docker containers, you encounter a bug that crashes the application. What do you do first?

- A. Restart the container and hope it doesn't happen again
- B. Remove the container and deploy a new one
- C. Check the logs to diagnose the issue and fix the bug in the Dockerfile
- D. Rollback to a previous container version

Difficulty Level: MEDIUM

Reference: N/A

17. What is the main purpose of Git in DevOps?

- A. To monitor server health
- B. To automate deployments
- C. To manage code versioning
- D. To analyze system logs

Difficulty Level: MEDIUM

Reference: <https://git-scm.com/about/branching-and-merging>

18. Which of the following commands is used to create a Docker image from a Dockerfile?

- A. `docker build`
- B. `docker commit`

- C. docker start
- D. docker run

Difficulty Level: MEDIUM

Reference: <https://docs.docker.com/build/>

19. Which tool allows you to define and manage infrastructure as code on AWS?

- A. Terraform
- B. Nagios
- C. Git
- D. Gradle

Difficulty Level: MEDIUM

Reference: <https://www.terraform.io/>

20. In DevOps, what is meant by "infrastructure as code"?

- A. Coding practices to write better application code
- B. Managing infrastructure through code files
- C. Using code only for documentation
- D. Testing infrastructure using unit tests

Difficulty Level: MEDIUM

Reference: <https://www.terraform.io/use-cases/infrastructure-as-code>

21. Which of the following is NOT a source control tool?

- A. Git
- B. SVN
- C. CVN
- D. Jenkins

Difficulty Level: MEDIUM

Reference: <https://www.jenkins.io/doc/>

22. What is a "pipeline" in CI/CD?

- A. A network channel for communication
- B. A log management system
- C. A set of automated processes for software delivery
- D. A storage unit for artifacts

Difficulty Level: MEDIUM

Reference: <https://www.redhat.com/en/topics/devops/what-cicd-pipeline>

23. Which file format is commonly used for Docker Compose files?

- A. JSON
- B. XML
- C. YAML
- D. HTML

Difficulty Level: MEDIUM

Reference: <https://docs.docker.com/compose/>

24. Which command is used to list all Docker containers (both running and stopped)?

- A. docker ps
- B. docker ps -a
- C. docker images
- D. docker containers

Difficulty Level: MEDIUM

Reference: N/A

25. Which command in Unix is used to display the first 10 lines of a file?

- A. head
- B. tail
- C. less
- D. cat

Difficulty Level: TOUGH

Reference: <https://man7.org/linux/man-pages/man1/head.1.html>

26. In Ansible, what is a role?

- A. A way to encrypt data
- B. A list of servers in the inventory
- C. A special type of module
- D. A set of tasks bundled into reusable units

Difficulty Level: TOUGH

Reference:

https://docs.ansible.com/ansible/latest/playbook_guide/playbooks_reuse_roles.html

27. What does the docker exec command do?

- A. Build a Docker image
- B. Run a new container
- C. Execute a command inside a running container
- D. Remove a running container

Difficulty Level: TOUGH

Reference: <https://docs.docker.com/reference/cli/docker/container/exec/>

28. Which command is used to stop all running Docker containers?

- A. `docker stop $(docker ps -q)`
- B. `docker kill all`
- C. `docker ps stop`
- D. `docker container stop`

Difficulty Level: TOUGH

Reference: <https://docs.docker.com/reference/cli/docker/container/stop/>

29. What type of testing focuses on checking individual components of a system?

- A. Unit testing
- B. Integration testing
- C. Load testing
- D. Functional testing

Difficulty Level: TOUGH

Reference: <https://aws.amazon.com/what-is/unit-testing/#:~:text=Unit%20testing%20is%20the%20process,test%20for%20each%20code%20unit.>

30. Which DevOps practice aims to detect issues as early as possible in the development process

- A. Continuous Deployment
- B. Continuous Monitoring
- C. Continuous Integration
- D. Continuous Scaling

Difficulty Level: TOUGH

Reference: <https://www.techtarget.com/searchsoftwarequality/definition/integration-testing#:~:text=Integration%20testing%20identifies%20issues%20with,can%20and%20do%20change%20often.>

31. How does LocalStack support Infrastructure as Code (IaC) testing?

- A. By allowing full AWS integration for IaC
- B. By providing an AWS-compatible local environment to test IaC without actual cloud usage
- C. By requiring internet connectivity to test IaC in AWS
- D. By connecting directly to the AWS API during testing

Difficulty Level: TOUGH

Reference: <https://docs.localstack.cloud/getting-started/>

32. How can LocalStack help optimize costs during the development and testing phases of a project?
- A. By automatically scaling resources in AWS
 - B. By emulating AWS services locally, reducing the need to interact with actual AWS services
 - C. By providing discounted AWS services
 - D. By creating production-ready cloud environments

Difficulty Level: TOUGH

Reference: <https://docs.localstack.cloud/user-guide/>

Total Number of Questions Generated: 32

Module Name	DevOps
Question Number	Answer Key
1	B
2	C
3	A
4	A
5	A
6	B
7	A
8	C
9	C
10	C
11	A
12	C
13	A
14	A
15	A
16	C
17	C
18	A
19	A
20	B
21	D
22	C
23	C
24	B
25	A
26	D
27	C
28	A
28	A
30	C
31	B
32	B