**TERRAFORM MCQ’s AND ANSWERS**

Terraform Basics

1. What is Terraform mainly used for?

A) Infrastructure as Code (IaC)

B) Continuous Integration/Continuous Deployment (CI/CD)

C) Containerization

D) Monitoring

Answer: A) Infrastructure as Code (IaC)

2. Which file format does Terraform use for configuration files?

A) JSON

B) YAML

C) HCL (HashiCorp Configuration Language)

D) XML

Answer: C) HCL (HashiCorp Configuration Language)

Terraform Commands

3. Which command initializes a Terraform working directory?

A) terraform init

B) terraform apply

C) terraform plan

D) terraform destroy

Answer: A) terraform init

4. What is the purpose of the terraform plan command?

A) To apply changes

B) To destroy infrastructure

C) To show the plan for changes without making any changes

D) To initialize a working directory

Answer: C) To show the plan for changes without making any changes

Terraform Configuration

5. What does the resource block in a Terraform configuration define?

A) Provider settings

B) Resources to be created

C) Input variables

D) Output values

Answer: B) Resources to be created

6. What does the provider block in Terraform define?

A) Resources to be created

B) Provider settings

C) Input variables

D) Output values

Answer: B) Provider settings

Terraform Best Practices

7. What is the purpose of the terraform fmt command?

A) To validate the syntax of a Terraform configuration

B) To format the configuration files

C) To apply changes

D) To destroy infrastructure

Answer: B) To format the configuration files

Terraform Basics

8. What is the primary benefit of using Terraform for infrastructure management?

A) Manual infrastructure provisioning

B) Infrastructure as Code (IaC)

C) Containerization

D) Monitoring

Answer: B) Infrastructure as Code (IaC)

9. Which of the following is a key feature of Terraform?

A) State management

B) Automated testing

C) Continuous Integration

D) Load balancing

Answer: A) State management

Terraform Commands

10. Which command applies changes to the infrastructure?

A) terraform init

B) terraform plan

C) terraform apply

D) terraform destroy

Answer: C) terraform apply

11. What is the purpose of the terraform destroy command?

A) To apply changes

B) To show the plan for changes

C) To destroy the infrastructure managed by Terraform

D) To initialize a working directory

Answer: C) To destroy the infrastructure managed by Terraform

Terraform Configuration

12. What is the purpose of the variable block in Terraform?

A) To define output values

B) To define input variables

C) To define resources

D) To define providers

Answer: B) To define input variables

13. What is the purpose of the output block in Terraform?

A) To define input variables

B) To define resources

C) To define output values

D) To define providers

Answer: C) To define output values

Terraform Best Practices

14. What is the benefit of using a consistent naming convention for Terraform resources?

A) Improved performance

B) Better security

C) Improved readability and maintainability

D) Reduced costs

Answer: C) Improved readability and maintainability

15. What is the purpose of the Terraform state file?

A) To store sensitive data

B) To track the current state of infrastructure

C) To define infrastructure resources

D) To manage provider configurations

Answer: B) To track the current state of infrastructure

16. What happens if the Terraform state file is lost?

A) Infrastructure is automatically recreated

B) Terraform cannot manage the infrastructure

C) State file is automatically regenerated

D) Nothing, it's not important

Answer: B) Terraform cannot manage the infrastructure

Terraform Modules

17. What is a Terraform module?

A) A collection of resources

B) A single resource

C) A provider configuration

D) A reusable piece of infrastructure configuration

Answer: D) A reusable piece of infrastructure configuration

18. What is the benefit of using Terraform modules?

A) Reduced code duplication

B) Improved performance

C) Better security

D) All of the above

Answer: D) All of the above

Terraform Providers

19. What is a Terraform provider?

A) A plugin that interacts with a specific infrastructure platform

B) A resource that is created in infrastructure

C) A module that is reused across configurations

D) A state file that tracks infrastructure

Answer: A) A plugin that interacts with a specific infrastructure platform

20. Which of the following is an example of a Terraform provider?

A) AWS

B) Azure

C) Google Cloud

D) All of the above

Answer: D) All of the above

Terraform Workspaces

21. What is a Terraform workspace?

A) A separate state file for managing multiple environments

B) A single resource configuration

C) A provider configuration

D) A module configuration

Answer: A) A separate state file for managing multiple environments

Terraform Security

22. What is the best practice for managing sensitive data in Terraform?

A) Hardcoding sensitive data in configuration files

B) Using environment variables or secure storage

C) Sharing sensitive data publicly

D) Ignoring sensitive data altogether

Answer: B) Using environment variables or secure storage

Terraform Best Practices

23. What is the benefit of using a consistent coding style in Terraform?

A) Improved performance

B) Better security

C) Improved readability and maintainability

D) Reduced costs

Answer: C) Improved readability and maintainability

Terraform Troubleshooting

24. What is the purpose of the terraform refresh command?

A) To apply changes

B) To destroy infrastructure

C) To update the state file to match real-world resources

D) To initialize a working directory

Answer: C) To update the state file to match real-world resources

Terraform Configuration

25. What is the purpose of the depends\_on attribute in Terraform?

A) To specify dependencies between resources

B) To define input variables

C) To define output values

D) To manage provider configurations

Answer: A) To specify dependencies between resources

Terraform Modules

26. How do you use a Terraform module?

A) By defining a new resource

B) By creating a new provider

C) By referencing a module in your configuration

D) By running a Terraform command

Answer: C) By referencing a module in your configuration

Terraform State

27. What is the purpose of the terraform state rm command?

A) To remove a resource from the state file

B) To delete a resource from infrastructure

C) To update the state file

D) To initialize a working directory

Answer: A) To remove a resource from the state file

Terraform Providers

28. How do you configure a Terraform provider?

A) By defining a resource

B) By creating a module

C) By specifying provider settings in the configuration

D) By running a Terraform command

Answer: C) By specifying provider settings in the configuration

Terraform Best Practices

29. What is the benefit of using version control for Terraform configurations?

A) Improved performance

B) Better security

C) Change tracking and collaboration

D) Reduced costs

Answer: C) Change tracking and collaboration

Terraform Configuration

30. What is the purpose of the lifecycle block in Terraform?

A) To define resource dependencies

B) To specify resource creation and deletion behavior

C) To manage provider configurations

D) To define output values

Answer: B) To specify resource creation and deletion behavior

Terraform Modules

31. What is the benefit of using a Terraform module registry?

A) Improved performance

B) Better security

C) Easy discovery and reuse of modules

D) Reduced costs

Answer: C) Easy discovery and reuse of modules

Terraform State

32. What happens when you run terraform apply with a state file that is out of sync with the real infrastructure?

A) Terraform will automatically update the state file

B) Terraform will destroy and recreate the infrastructure

C) Terraform will prompt you to manually update the state file

D) Terraform will abort the apply operation

Answer: A) Terraform will automatically update the state file

Terraform Providers

33. How do you upgrade a Terraform provider?

A) By running terraform init -upgrade

B) By defining a new provider version in the configuration

C) By manually downloading the new provider version

D) By running terraform apply -upgrade

Answer: A) By running terraform init -upgrade

Terraform Best Practices

34. What is the benefit of using a consistent naming convention for Terraform resources?

A) Improved performance

B) Better security

C) Improved readability and maintainability

D) Reduced costs

Answer: C) Improved readability and maintainability

Terraform Configuration

35. What is the purpose of the count attribute in Terraform?

A) To define a loop for creating multiple resources

B) To specify a single resource configuration

C) To manage provider configurations

D) To define output values

Answer: A) To define a loop for creating multiple resources

Terraform Modules

36. How do you pass variables to a Terraform module?

A) Using the input block

B) Using the variable block

C) Using the module block with argument syntax

D) Using environment variables

Answer: C) Using the module block with argument syntax

Terraform State

37. What is the purpose of the terraform state list command?

A) To list all resources in the state file

B) To list all providers in the configuration

C) To list all modules in the configuration

D) To list all variables in the configuration

Answer: A) To list all resources in the state file

Terraform Providers

38. What is the purpose of the alias attribute in a Terraform provider configuration?

A) To specify a custom name for a provider

B) To define a new provider configuration

C) To manage multiple provider configurations

D) To specify a provider version

Answer: C) To manage multiple provider configurations

Terraform Best Practices

39. What is the benefit of using Terraform workspaces?

A) Improved performance

B) Better security

C) Managing multiple environments with separate state files

D) Reduced costs

Answer: C) Managing multiple environments with separate state files

Terraform Configuration

40. What is the purpose of the for\_each attribute in Terraform?

A) To create a single resource

B) To create multiple resources from a map or set

C) To manage provider configurations

D) To define output values

Answer: B) To create multiple resources from a map or set

Terraform Modules

41. What is the benefit of using Terraform modules?

A) Improved performance

B) Better security

C) Reusability and modularity

D) Reduced costs

Answer: C) Reusability and modularity

Terraform State

42. What is the purpose of the terraform state show command?

A) To display the state file

B) To display detailed information about a resource

C) To list all resources in the state file

D) To manage provider configurations

Answer: B) To display detailed information about a resource

Terraform Providers

43. What is the purpose of the version attribute in a Terraform provider configuration?

A) To specify the provider version

B) To manage multiple provider configurations

C) To define a new provider

D) To specify the resource version

Answer: A) To specify the provider version

Terraform Best Practices

44. What is the benefit of using a terraform fmt command?

A) Improved performance

B) Better security

C) Consistent formatting of Terraform configuration files

D) Reduced costs

Answer: C) Consistent formatting of Terraform configuration files

Terraform Configuration

45. What is the purpose of the sensitive attribute in Terraform?

A) To mark a variable as sensitive

B) To define a new resource

C) To manage provider configurations

D) To specify output values

Answer: A) To mark a variable as sensitive

Terraform Modules

46. How do you output values from a Terraform module?

A) Using the output block

B) Using the variable block

C) Using the resource block

D) Using environment variables

Answer: A) Using the output block

Terraform State

47. What is the purpose of the terraform state mv command?

A) To move a resource from one state file to another

B) To rename a resource in the state file

C) To update the state file

D) To delete a resource from the state file

Answer: B) To rename a resource in the state file

Terraform Providers

48. What is the purpose of the required\_providers block in Terraform?

A) To specify the required provider versions

B) To define a new provider

C) To manage multiple provider configurations

D) To specify the provider alias

Answer: A) To specify the required provider versions

Terraform Best Practices

49. What is the benefit of using Terraform documentation?

A) Improved performance

B) Better security

C) Understanding Terraform configuration and resources

D) Reduced costs

Answer: C) Understanding Terraform configuration and resources

Terraform Troubleshooting

50. What is the purpose of the terraform validate command?

A) To validate the syntax of Terraform configuration files

B) To apply changes

C) To destroy infrastructure

D) To initialize a working directory

Answer: A) To validate the syntax of Terraform configuration files

Terraform Configuration

51. What is the purpose of the locals block in Terraform?

A) To define input variables

B) To define local values

C) To define output values

D) To manage provider configurations

Answer: B) To define local values

Terraform Modules

52. What is the benefit of using a Terraform module with a source attribute?

A) Improved performance

B) Better security

C) Reusability of module code

D) Reduced costs

Answer: C) Reusability of module code

Terraform State

53. What happens when you run terraform destroy?

A) Terraform updates the state file

B) Terraform deletes the infrastructure managed by Terraform

What happens when you run terraform destroy?

C) Terraform lists all resources in the state file

D) Terraform initializes a working directory

Answer: B) Terraform deletes the infrastructure managed by Terraform

Terraform Providers

54. What is the purpose of the token attribute in a Terraform provider configuration?

A) To specify the provider version

B) To authenticate with the provider

C) To define a new provider

D) To manage multiple provider configurations

Answer: B) To authenticate with the provider

Terraform Best Practices

55. What is the benefit of using a consistent naming convention for Terraform resources?

A) Improved performance

B) Better security

C) Improved readability and maintainability

D) Reduced costs

Answer: C) Improved readability and maintainability

Terraform Configuration

56. What is the purpose of the depends\_on meta-argument in Terraform?

A) To specify resource dependencies

B) To define input variables

C) To define output values

D) To manage provider configurations

Answer: A) To specify resource dependencies

Terraform Modules

57. How do you version a Terraform module?

A) Using the version attribute

B) Using the source attribute

C) Using a Git tag

D) Using environment variables

Answer: C) Using a Git tag

Terraform State

58. What is the purpose of the terraform refresh command?

A) To apply changes

B) To update the state file to match real-world resources

C) To destroy infrastructure

D) To initialize a working directory

Answer: B) To update the state file to match real-world resources

Terraform Providers

59. What is the purpose of the alias attribute in a Terraform provider configuration?

A) To specify a custom name for a provider

B) To define a new provider

C) To manage multiple provider configurations

D) To specify the provider version

Answer: C) To manage multiple provider configurations

Terraform Best Practices

60. What is the benefit of using Terraform workspaces for managing multiple environments?

A) Improved performance

B) Better security

C) Separate state files for each environment

D) Reduced costs

Answer: C) Separate state files for each environment

Terraform Configuration

61. What is the purpose of the dynamic block in Terraform?

A) To define a single resource

B) To create dynamic blocks within a resource

C) To manage provider configurations

D) To define output values

Answer: B) To create dynamic blocks within a resource

Terraform Modules

62. How do you share a Terraform module across multiple configurations?

A) By copying the module code

B) By using a module registry

C) By defining a new provider

D) By using environment variables

Answer: B) By using a module registry

Terraform State

63. What is the purpose of the terraform state pull command?

A) To update the state file

B) To display the current state file

C) To manage provider configurations

D) To initialize a working directory

Answer: B) To display the current state file

Terraform Providers

64. What is the purpose of the region attribute in a Terraform provider configuration?

A) To specify the provider version

B) To define a new provider

C) To specify the cloud region

D) To manage multiple provider configurations

Answer: C) To specify the cloud region

Terraform Best Practices

65. What is the benefit of using Terraform to manage infrastructure?

A) Manual infrastructure management

B) Infrastructure as Code (IaC)

C) Improved performance

D) Reduced costs

Answer: B) Infrastructure as Code (IaC)

66. What is the purpose of the validation block in Terraform?

A) To define input variables

B) To validate variable input

C) To define output values

D) To manage provider configurations

Answer: B) To validate variable input

Terraform Modules

67. What is the benefit of using Terraform modules?

A) Reduced code reusability

B) Improved performance

C) Modular and reusable infrastructure code

D) Increased complexity

Answer: C) Modular and reusable infrastructure code

Terraform State

68. What happens when you run terraform import?

A) Terraform creates a new resource

B) Terraform updates the state file with existing resources

C) Terraform destroys infrastructure

D) Terraform initializes a working directory

Answer: B) Terraform updates the state file with existing resources

Terraform Providers

69. What is the purpose of the required\_version attribute in Terraform?

A) To specify the provider version

B) To specify the Terraform version

C) To manage multiple provider configurations

D) To define a new provider

Answer: B) To specify the Terraform version

Terraform Best Practices

70. What is the benefit of using version control for Terraform configurations?

A) Improved performance

B) Better security

C) Change tracking and collaboration

D) Reduced costs

Answer: C) Change tracking and collaboration