1. **What is Terraform primarily used for?**
   * Continuous Integration
   * Infrastructure as Code (IaC)
   * Application Development
   * Software Testing
2. **Which company developed Terraform?**
   * Red Hat
   * Microsoft
   * HashiCorp
   * Amazon
3. **Which language is primarily used in Terraform configuration files?**
   * Python
   * YAML
   * JSON
   * HCL
4. **What is the main purpose of the terraform init command?**
   * To initialize a Terraform configuration
   * To apply configuration changes
   * To destroy resources
   * To validate configuration files
5. **Which of the following is NOT a Terraform command?**
   * terraform apply
   * terraform destroy
   * terraform validate
   * terraform compile
6. **Which feature of Terraform allows you to create, update, and delete infrastructure resources consistently?**
   * Orchestration
   * Automation
   * Provisioning
   * State Management
7. **What does Terraform use to track the state of resources?**
   * Logs
   * Configuration files
   * State files
   * Version control
8. **In Terraform, what is a provider?**
   * A resource manager
   * A cloud service
   * A plugin that interacts with APIs
   * A code repository
9. **Which command initializes the providers defined in a configuration?**
   * terraform plan
   * terraform init
   * terraform apply
   * terraform destroy
10. **How are providers specified in Terraform code?**
    * Using resource blocks
    * Using module blocks
    * Using provider blocks
    * Using data blocks
11. **Which command would you use to see the available versions of a provider?**
    * terraform version
    * terraform providers
    * terraform search
    * terraform provider list
12. **What is the correct syntax to define a string variable in HCL?**
    * variable { "type" = "string" }
    * variable "name" { type = string }
    * var "name" = string
    * define variable { type = string }
13. **How are lists represented in HCL?**
    * [item1, item2]
    * {item1, item2}
    * (item1, item2)
    * item1, item2
14. **What command is used to create resources defined in a local Terraform configuration?**
    * terraform init
    * terraform apply
    * terraform validate
    * terraform output
15. **Which block is used to define a local resource in Terraform?**
    * resource
    * module
    * provider
    * data
16. **Where is the state of local resources stored by default?**
    * In a remote backend
    * In a .tfstate file
    * In the cloud
    * In Terraform Cloud
17. **What is required to authenticate Terraform with AWS for creating an EC2 instance?**
    * AWS credentials
    * API keys
    * SSH keys
    * AWS account ID
18. **Which block defines the EC2 instance resource in Terraform?**
    * resource "aws\_instance"
    * resource "ec2"
    * instance "aws\_ec2"
    * provider "aws"
19. **Which argument specifies the type of instance to create?**
    * instance\_type
    * type
    * size
    * machine\_type
20. **Which Terraform attribute is used to specify the AMI for an EC2 instance?**
    * ami\_id
    * ami
    * image
    * image\_id
21. **Which block defines an input variable in Terraform?**
    * variable
    * input
    * var
    * define
22. **Which block defines an output variable in Terraform?**
    * output
    * print
    * return
    * export
23. **How do you reference an input variable within a Terraform configuration?**
    * var.<variable\_name>
    * input.<variable\_name>
    * ${<variable\_name>}
    * <variable\_name>
24. **Which argument in the output block defines what to display?**
    * value
    * output
    * print
    * show
25. **Which type is not a valid variable type in Terraform?**
    * string
    * map
    * char
    * list
26. **Which source of variable values has the highest precedence in Terraform?**
    * Environment variables
    * .tfvars files
    * Default values
    * Command-line flags
27. **How do you specify a variable type in Terraform?**
    * type = string
    * var type = string
    * variable "type" = string
    * kind = string
28. **What is the purpose of a data source in Terraform?**
    * To create resources
    * To fetch data from providers
    * To store variables
    * To log execution details
29. **How is a data source defined in Terraform?**
    * Using the data block
    * Using the resource block
    * Using the source block
    * Using the input block
30. **What does the local block in Terraform do?**
    * Creates temporary variables
    * Defines local functions
    * Stores configuration files
    * Defines local variables
31. **Which function converts a string to uppercase in Terraform?**
    * upper()
    * uppercase()
    * to\_upper()
    * up()
32. **What is the correct way to define a local variable in Terraform?**
    * local { var\_name = "value" }
    * locals { var\_name = "value" }
    * variable { var\_name = "value" }
    * define { var\_name = "value" }
33. **What does the terraform init command do?**
    * Initializes the Terraform state file
    * Initializes the provider plugins and modules
    * Destroys the existing infrastructure
    * Creates a plan file
34. **What is the primary purpose of the terraform plan command?**
    * To apply configuration changes to resources
    * To validate Terraform syntax
    * To create an execution plan without making changes
    * To destroy resources
35. **What does the terraform apply command do?**
    * Formats Terraform code
    * Validates the configuration files
    * Applies the changes required to reach the desired state of the configuration
    * Initializes the Terraform environment
36. **Which command is used to format Terraform code according to HashiCorp's style conventions?**
    * terraform plan
    * terraform validate
    * terraform fmt
    * terraform tidy
37. **What does the terraform validate command do?**
    * Checks the code for syntax errors
    * Applies the configuration
    * Initializes the working directory
    * Deletes the state file
38. **What is the primary purpose of the terraform destroy command?**
    * To refresh the current state
    * To format the configuration files
    * To remove all resources defined in the configuration
    * To output the resource plan
39. **Which flag would you use with terraform apply to save the execution plan to a file?**
    * -save
    * -out
    * -store
    * -plan
40. **What does the -auto-approve flag do when used with terraform apply or terraform destroy?**
    * Requires manual approval
    * Automatically applies changes without confirmation
    * Validates the configuration before applying
    * Only plans the changes without applying
41. **Where is the Terraform state backup file stored by default?**
    * backup.tf
    * .terraform/backup.tfstate
    * terraform.tfstate.backup
    * backup/terraform.tfstate
42. **What is the function of the terraform show command?**
    * Shows the formatted code
    * Shows the current state of the infrastructure
    * Shows the Terraform version
    * Shows the provider details
43. **Which command would you use to reformat all .tf files in a directory?**
    * terraform reformat
    * terraform fmt
    * terraform validate
    * terraform plan
44. **What does the terraform plan -out=planfile command do?**
    * Saves the plan output to a file named planfile
    * Applies the changes described in planfile
    * Deletes the current plan file
    * Shows the current state of planfile
45. **Which Terraform command is used to confirm that your configuration is syntactically valid?**
    * terraform check
    * terraform init
    * terraform validate
    * terraform inspect
46. **Which of the following commands will destroy the infrastructure without prompting for confirmation?**
    * terraform destroy -force
    * terraform destroy -auto-approve
    * terraform destroy -y
    * terraform destroy -no-prompt
47. **Which command displays the changes made by a previously saved execution plan file?**
    * terraform plan -show
    * terraform show planfile
    * terraform display -plan
    * terraform show -out=planfile
48. **Which command can be used to verify the output format and values from the Terraform state file?**
    * terraform plan
    * terraform output
    * terraform validate
    * terraform fmt
49. **Which of the following cloud providers can be managed with Terraform?**
    * AWS
    * Azure
    * Google Cloud Platform
    * All of the above
50. **Terraform displays idempotence property. An example would be** 
    * Config file declares 4 t2.micro windows instances. The state file shows 2 windows instances are already present. Hence terraform will create 2 t2.micro windows instances newly
    * Config file declares 4 t2.micro windows instances. The state file shows 2 are already present. Hence terraform will destroy the existing two and create 4 newly
    * Config file declares 4 t2.micro windows instances. The state file shows 2 t2.micro Ubuntu instances are already present. And terraform creates 2 t2.micro windows instances newly
    * Config file declares 4 t2.micro windows instances. The state file shows 4 t2.micro RHEL instances are already present. And terraform does not take any action as 4 are already present
51. **What is Infra as code?**
    * Deploying your code in infrastructure provided by cloud provider
    * Its just another name for setting up auto scaling in cloud
    * Provisioning of infrastructure using code instead of through manual processes.
    * Using secret codes to access important IT infrastructure
52. **Format of terraform.tfstate file**
    * yaml
    * JSON
    * CSV
    * xml

1. **What is the primary purpose of Terraform remote state?**
   * To speed up Terraform plan execution
   * To store Terraform state files on the local machine
   * To share state between multiple workspaces and users
   * To enforce compliance policies on infrastructure

**Answer:** C) To share state between multiple workspaces and users

1. **Which of the following backends is commonly used for Terraform remote state management?**
   * Google Drive
   * AWS S3
   * GitHub
   * MySQL Database

**Answer:** B) AWS S3

1. **Which command is used to configure remote state in Terraform?**
   * terraform init
   * terraform remote
   * terraform state
   * terraform config

**Answer:** A) terraform init

1. **In Terraform, why is it important to lock remote state during updates?**
   * To prevent simultaneous updates by multiple users
   * To optimize performance during state retrieval
   * To secure state files from unauthorized access
   * To enable versioning of state files

**Answer:** A) To prevent simultaneous updates by multiple users

1. **What feature in Terraform remote state can be used to reference data from one state file into another?**
   * State merging
   * Data import
   * State sharing
   * Data sources

**Answer:** D) Data sources

1. **Which Terraform backend configuration block is used to define the remote state storage location?**
   * backend
   * remote
   * state
   * provider

**Answer:** A) backend

1. **What must be defined in the backend configuration to connect Terraform to a remote state storage?**
   * Credentials, region, and bucket details
   * Database connection string
   * Resource group name
   * API endpoint and access token

**Answer:** A) Credentials, region, and bucket details

1. **When using a remote state, which component handles state locking in Terraform?**
   * The Terraform CLI
   * Backend provider (e.g., S3, GCS)
   * Terraform Cloud only
   * Local state file manager

**Answer:** B) Backend provider (e.g., S3, GCS)

1. **Which of the following is a benefit of using Terraform remote state?**
   * Improved local storage efficiency
   * Easier state file versioning
   * Collaboration among team members on the same infrastructure
   * Automated state cleanup and archiving

**Answer:** C) Collaboration among team members on the same infrastructure

1. Bottom of Form
2. **What is the primary purpose of using modules in Terraform?**
   1. A. To increase code repetition.
   2. B. To modularize, organize, and reuse configuration code.
   3. C. To decrease the performance of Terraform.
   4. D. To ensure every resource is defined only once.

**Answer:** B. To modularize, organize, and reuse configuration code.

1. **Which command initializes a Terraform module and its required dependencies?**
   1. A. terraform apply
   2. B. terraform init
   3. C. terraform plan
   4. D. terraform validate

**Answer:** B. terraform init

1. **Which block is used within a Terraform module to expose input variables?**
   1. A. output
   2. B. provider
   3. C. variable
   4. D. resource

**Answer:** C. variable

1. **How can you source a module from the Terraform Registry?**
   1. A. Using the URL of the module directly.
   2. B. Using the source attribute with "registry" keyword.
   3. C. Specifying the module name with source = "terraform.io/registry/module".
   4. D. Using the source attribute with the module's unique identifier.

**Answer:** D. Using the source attribute with the module's unique identifier.

1. **Which of the following commands is used to view the output of a Terraform module after deployment?**
   1. A. terraform output
   2. B. terraform show
   3. C. terraform state
   4. D. terraform view

**Answer:** A. terraform output

1. **What is the main purpose of Terraform Cloud?**
   1. A. To store Terraform binary files.
   2. B. To provide a collaborative environment for Terraform workflows.
   3. C. To replace Terraform CLI.
   4. D. To host Terraform documentation.

**Answer:** B. To provide a collaborative environment for Terraform workflows.

1. **Which feature of Terraform Cloud allows for version-controlled infrastructure as code?**
   1. A. Remote state storage
   2. B. VCS Integration
   3. C. API access
   4. D. Team management

**Answer:** B. VCS Integration

1. **Which Terraform Cloud component is used to store and manage sensitive information such as API keys?**
   1. A. Variables
   2. B. Workspaces
   3. C. Remote State
   4. D. Sentinel

**Answer:** A. Variables

1. **Which execution mode in Terraform Cloud allows you to run Terraform commands from your local machine while still using Terraform Cloud’s state management?**
   1. A. Local Execution Mode
   2. B. Remote Execution Mode
   3. C. Hybrid Execution Mode
   4. D. CLI-driven Execution Mode

**Answer:** D. CLI-driven Execution Mode

1. **What happens when you use the count attribute within a module?**
   1. A. It repeats the module configuration multiple times.
   2. B. It sets the number of resources inside the module.
   3. C. It adds a count to each output variable.
   4. D. It only works with resource blocks, not modules.

**Answer:** A. It repeats the module configuration multiple times.

1. **In Terraform Cloud, which feature allows multiple configurations to share the same state data?**
   1. A. Workspaces
   2. B. Teams
   3. C. API tokens
   4. D. Modules

**Answer:** A. Workspaces

1. **What is the purpose of Terraform Cloud's workspace "locking" feature during a run?**
   1. A. To prevent other users from viewing the run.
   2. B. To ensure that only one run modifies the state at a time.
   3. C. To restrict access to the workspace settings.
   4. D. To backup the state file automatically.

**Answer:** B. To ensure that only one run modifies the state at a time.

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