

****You:****

1.npm 2.ec2 3.s3 4.ssh client 5.init 6.commit 7.add . 8.status 9.lambda 10.tcp 11.git pull 12.elastic ip
13.serverless computing 14.nano 15.mfa 16.dns 17.domain name

****ChatGPT:****

1. npm: npm (Node Package Manager) is a package manager for JavaScript that allows developers to install, manage, and share reusable code packages and libraries. It is primarily used for managing dependencies in Node.js projects.
2. EC2: EC2 (Elastic Compute Cloud) is a web service provided by Amazon Web Services (AWS) that allows users to rent virtual servers in the cloud. EC2 instances can be customized to suit specific computing needs, providing scalability, flexibility, and control over the virtual server environment.
3. S3: S3 (Simple Storage Service) is an object storage service provided by AWS. It allows users to store and retrieve large amounts of data in the form of objects, such as files, images, and videos. S3 provides high durability, availability, and scalability, making it suitable for a wide range of storage use cases.
4. SSH client: SSH (Secure Shell) is a cryptographic network protocol used for secure remote login, command execution, and file transfer between machines. An SSH client is a software application that enables users to connect to remote servers securely using the SSH protocol.
5. init: "init" is a command used in various contexts to initialize or start a new project or configuration. For example, in the context of version control systems like Git, "git init" initializes a new Git repository in the current directory.
6. commit: In the context of version control systems like Git, a commit is a record of changes made to a repository. When a developer commits changes, they create a new version of the repository that includes the changes made since the last commit. Committing changes is an essential step in tracking the history of code changes and collaborating with other developers.
7. add .: In the context of version control systems like Git, "git add ." is a command that adds all the modified and new files in the current directory and its subdirectories to the staging area. The staging area is a step before committing changes and allows developers to select which changes should be included in the next commit.
8. status: In the context of version control systems like Git, "git status" is a command that shows the current status of the repository. It provides information about modified files, files in the staging area, and untracked files. The status command helps developers track the state of their code and determine which changes need to be committed.
9. Lambda: Lambda is a serverless computing service provided by AWS. It allows developers to run code without provisioning or managing servers. With Lambda, developers can upload their code and define triggers that invoke the code in response to events, such as changes in data, updates to the S3 bucket, or API requests.
10. TCP: TCP (Transmission Control Protocol) is a widely used network protocol that provides reliable, ordered, and error-checked delivery of data between applications over an IP network. It is one of the main protocols in the Internet Protocol Suite and ensures the proper transmission and reception of data packets between networked devices.
11. git pull: "git pull" is a command used in Git to fetch the latest changes from a remote repository and merge them into the current branch. It combines the "git fetch" and "git merge" commands into a

single step, allowing developers to update their local repository with the latest changes from a shared repository.

12. Elastic IP: An Elastic IP is a static public IP address that can be allocated and associated with an EC2 instance in AWS. Unlike the default dynamic IP addresses assigned to EC2 instances, an Elastic IP remains constant even if the instance is stopped or restarted. Elastic IPs are useful when you need a fixed public IP address for your EC2 instance, such as hosting a website or setting up network applications.
13. Serverless computing: Serverless computing is a cloud computing model where developers can build and run applications without the need to manage or provision servers. In a serverless architecture, the cloud provider (such as AWS Lambda or Azure Functions) dynamically manages the allocation and scaling of resources based on the incoming requests or events. Developers only need to focus on writing the application code, and the cloud provider takes care of the infrastructure and scaling automatically.
14. nano: Nano is a text editor commonly found on Unix-like systems. It is a lightweight and user-friendly command-line text editor that allows users to create, view, and edit text files. Nano provides basic editing capabilities and keyboard shortcuts for performing common tasks within the editor.
15. MFA: MFA stands for Multi-Factor Authentication. It is a security mechanism that requires users to provide two or more different forms of authentication before gaining access to a system or service. Typically, MFA combines something the user knows (such as a password), something the user possesses (such as a physical token or smartphone), and/or something inherent to the user (such as a fingerprint or retina scan). MFA adds an extra layer of security to protect against unauthorized access.
16. DNS: DNS (Domain Name System) is a decentralized naming system used to translate human-readable domain names (such as example.com) into IP addresses (such as 192.0.2.1) that computers can understand. DNS enables users to access websites and other resources on the internet by typing domain names into web browsers, while behind the scenes, DNS servers resolve those domain names to their corresponding IP addresses.
17. Domain name: A domain name is a unique, human-readable identifier used to access websites and other resources on the internet. It serves as a memorable name that represents a specific IP address or group of IP addresses associated with a particular website or online service. Domain names are registered and managed through domain registrars and follow a hierarchical naming structure, with top-level domains (TLDs) like .com, .org, or .net.

 You:

ttl

 ChatGPT:

TTL stands for "Time to Live." In the context of computer networking and the Domain Name System (DNS), TTL refers to a value that determines the amount of time a DNS record can be cached by resolving servers and other devices before it should be discarded or refreshed.

When a DNS record is queried, the DNS server responding to the query includes a TTL value in the response. The TTL value specifies the duration in seconds that the record can be cached by intermediate DNS servers, web browsers, or other network devices.

The purpose of TTL is to control how long DNS information remains valid in caching systems. It helps in efficient caching and reduces the load on DNS servers by preventing unnecessary frequent lookups for the same information.

For example, if a DNS record has a TTL of 3600 seconds (1 hour), resolving servers that receive the record will cache it for one hour. During this time, subsequent queries for the same record can be answered from the cache without querying the authoritative DNS server. After the TTL expires, the caching servers will discard the record and request fresh information from the authoritative DNS server.

The TTL value can be configured by the owner of the DNS zone and can vary for different types of DNS records within the zone. Shorter TTL values are useful when DNS changes need to propagate quickly, such as during a migration or when updating DNS records for a website. Longer TTL values can be set for records that rarely change, reducing the number of queries to the authoritative DNS server.

It's worth noting that TTL is specified in seconds and can range from a few seconds to several days or even longer, depending on the configuration and requirements of the DNS zone.

You:

1.ttl 2.ns 3.soa 4.cname

ChatGPT:

1. TTL (Time to Live): As mentioned in the previous response, TTL (Time to Live) is a value in DNS (Domain Name System) that determines the length of time a DNS record can be cached by resolving servers and other devices before it should be discarded or refreshed. The TTL value is specified in seconds and is used to control the duration of DNS record caching.
2. NS (Name Server): NS (Name Server) records are DNS records that specify the authoritative name servers for a domain. They indicate which DNS servers are responsible for providing the correct DNS information for a domain. NS records are essential for delegating control of a domain to specific DNS servers and routing DNS queries to the appropriate authoritative name servers.
3. SOA (Start of Authority): SOA (Start of Authority) is a DNS resource record that provides information about the authoritative DNS server for a particular DNS zone. The SOA record contains details such as the primary name server for the zone, the email address of the responsible party, serial number for version control, refresh and retry intervals, and other settings related to the zone. The SOA record is typically found at the beginning of a DNS zone file.
4. CNAME (Canonical Name): A CNAME (Canonical Name) record is a DNS record used to create an alias or an alternate name for a domain or subdomain. It associates one domain name with another domain name, allowing DNS queries for the alias to be resolved to the target domain's IP address. CNAME records are commonly used for creating subdomains, redirecting domains, or pointing multiple domain names to the same IP address.