

## Interview question for cloud

Google

### Google HR Screening

- What are the HTTP methods? PUT POST DELETE GET

Answer: HTTP methods are ways computers communicate over the web. PUT is for updates, POST for sending data, DELETE for removal, and GET for fetching information.

- What is the time complexity of merge sort?

Imagine sorting a deck of cards. Merge sort takes  $n \log n$  steps, meaning it efficiently organizes cards in a way that's not too slow.  $O(n \log n)$

- What are the status codes available?

These are messages computers exchange during web requests. 200 means success, 404 means not found, like when a webpage isn't available.

- What is the difference between PUT and POST?

Think of updating a social media profile. PUT is like changing your name, while POST is like adding a new photo or status. PUT is for updating or creating a resource; POST is for submitting data to be processed.

- What are website cookies?

Cookies are small data pieces for session management and tracking. Cookies are like small notes websites leave on your computer. They remember things, like your login status or items in a shopping cart.

- How to check IO Usage for machine?

SAR utilities are like detectives for your computer. They investigate and report on different activities, like how your computer uses its input and output (IO).

- How to capture and analyse network traffic?

Tcpdump. Tcpdump captures and analyzes network traffic.

- How to check boot logs in linux?

journalctl -b. Boot logs are like a diary of your computer starting up. journalctl -b lets you read this diary from the latest boot.

- What is the significance of SIGKILL?

SIGKILL is like a command to instantly stop that person from whatever they're doing, no questions asked. SIGKILL forcefully terminates a process, cannot be caught or ignored.

- Which signal will be sent to OS when you run kill -9 PID command in linux?

SIGKILL

- Caching mechanism?

Caching stores frequently accessed data copies for faster retrieval. Caching is like keeping a copy of your favorite book on your desk. It's faster to grab and read than going to the library each time.

- How the TCP Handshake work behind the screen?

TCP handshake is like a polite introduction before a conversation. It's a series of steps (SYN, SYN-ACK, and ACK) to ensure both sides are ready to talk.

- When you deploy web server what are the security measure you would take?

Use HTTPS, implement firewalls, keep software updated, strong authentication, and monitor logs.

- How the internet work high level?

The internet is like a huge library where computers share information. They talk to each other using specific rules (protocols) like TCP/IP.

- Data Structure

Code was given you need to understand flow and tell them the final output

- Tree Question (Left order traversal)

- String palindrome

- Bubble Sort (But it was wrong code and they told me I need to identify the bug and correct it and tell the time complexity of the algorithm and any better sorting algorithm apart from this).

### **Google RRK1 Interview Question**

- How would you check whether the user has to execute permission or not?

To check whether a user has execute permission, you can use the `ls` command with the `-l` option. Execute permission is denoted by an 'x' in the permission field.

- How do you call the HTTP request method without a browser or curl?

You can use the `telnet` command to manually send an HTTP request. For example: `telnet example.com 80`, followed by the HTTP request.

- What are the parameter available in the curl command?

Some common parameters in the curl command include `-X` for specifying the request method, `-H` for setting headers, and `-d` for sending data in the request body.

- A different alternative and flavor for curl command?

An alternative to curl is `wget`, which also allows downloading files from the command line.

- What happen we you run the cat command on terminal internal workflow?

The `cat` command concatenates and displays the content of files. When run without arguments, it reads from standard input and displays it on the terminal.

- What if I got an error cat command not found what could be the possible issue?

If you get a "cat command not found" error, it may indicate that the `cat` command is not installed on the system. You can install it using the package manager for your operating system.

- What if I can't able to SSH into the remote machine? What is the possible step would

If you can't SSH into a remote machine, possible issues could include network connectivity problems, incorrect credentials, or SSH service not running on the remote machine.

- Practical coding round java code snippet was given

### **Google RRK2 Interview Question**

- Basic web technology.

It likely involves questions about fundamental web technologies, such as HTML, CSS, JavaScript, and the basics of web development.

- Type of Request

Common types include:

GET: Retrieve data from a specified resource.

POST: Submit data to be processed.

PUT: Update or create a resource.

DELETE: Request to delete a specified resource.

- What Type of status code?

HTTP status codes indicate the result of an HTTP request. Examples include:

2xx (e.g., 200 OK): Successful request.

3xx (e.g., 301 Moved Permanently): Redirect.

4xx (e.g., 404 Not Found): Client error.

5xx (e.g., 500 Internal Server Error): Server error.

- What is the HTTP method? PUT, POST, DELETE

PUT is used for updating or creating a resource, POST is for submitting data, and DELETE is for removing a resource.

- What is the difference between PUT & POST?

PUT: Used to update or create a resource at a specified URL. It's idempotent, meaning multiple identical requests will produce the same result as a single request.

POST: Used to submit data to be processed to a specified resource. It's not idempotent, and multiple identical requests may have different effects.

- Basics of networking, more about OSI model.

Involves understanding how devices communicate over a network, addressing, routing, and protocols like TCP/IP.

The OSI model has seven layers (Physical, Data Link, Network, Transport, Session, Presentation, Application), each responsible for specific aspects of communication.

- Shell commands for a particular situation.

To access a file in read mode, you can use the cat, less, or more commands, depending on the desired behavior.

- If a user wants to access the file in read mode. What command can use?

To access a file in read mode, you can use commands like:

cat filename to display the entire file content.

less filename for a page-by-page view with navigation.

more filename for basic text viewing.

- Networking concepts any very basics of networking some of the questions were direct and some were twisted?

- Basic Networking commands like nslookup, dig, ping, traceroute.

Commands like nslookup, dig, ping, and traceroute are used for DNS resolution,

network diagnostics, and tracing network paths.

### **Google GCA + System Design**

- System Design basic concepts.

System design involves understanding and solving complex problems in software architecture, scalability, and performance.

- Design Caching Server?

To design a caching server, you would consider how to store and retrieve data efficiently, handle cache expiration, and minimize cache misses.

- Design Netflix streaming engine?

Designing a streaming engine for Netflix involves addressing challenges related to content delivery, scalability, and ensuring a seamless user experience.

### **Google Googleiness + Leadership**

- They Check whether you are fit for the company or not.
- Some general questions and then he asked questions related to the role, basically he wanted to know whether I know about the role.