- an you describe your workflow when you create a script?
    - First I think about the problem, then create some concept to solve a small part of the problem, than I interate on top of if, adding more layers of complexity, at the end I test, and run some lint, create a pull request and submit to the team evaluate the solution proposed.
- What is GIT?
    - It's a SCM (source code management), it's a software that controls source code, and helps developers to work together and to share code.
- What is a dynamically/statically linked file?
    - dynamically uses the dynamic path for the file example ../../file
    - statically uses the static path for the file example /usr/local/bin/file
- What does "./configure && make && make install" do?
    - Compiles a source code, creates a binary file and copy to a pre defined path
- What is puppet/chef/ansible used for?
    - Automatize infrastructure, you create a code and run this code against an infrastructure
- What is Nagios/Zenoss/NewRelic used for?
    - Monitoring infrastructure and services.
- What is the difference between Containers and VMs?
    - VMs have all the OS stack, devices and so, containers uses the cgroup implementation from the kernel, and have a smaller footprint because of that.
- How do you create a new postgres user?
    - createuser command
- What is a virtual IP address? What is a cluster?
    - Virtual IP address, it's IP address defined in a virtual interface, a cluster it's 2 or more machines working together to delivery a service.
- How do you print all strings of printable characters present in a file?
    - using the command strings
- How do you find shared library dependencies?
    - ldd /fullpath/command
    - readelf -d /fullpath/command
- What is Automake and Autoconf?
    - They are programming tools to automate parts of the compilation process.

- ./configure shows an error that libfoobar is missing on your system, how could you fix this, what could be wrong?
    - Installing the dev or devel version of the lib, that will contain the source code to be compiled
- What are the advantages/disadvantages of script vs compiled program?
    - Scripts are easy to correct and see how works, compiled are much faster
- What's the relationship between continuous delivery and DevOps?
    - Continous delivery it's one subject inside the DevOps methodology, this subject explain and show us how to delivery sofware or services fast, without human intervention.
- What are the important aspects of a system of continuous integration and deployment?
    - testing, automatize the process, decrease human error, automate quality of code, check of vulnerabilities, lint to have a more reliable and trustful process/delivery

- A careless sysadmin executes the following command: chmod 444 /bin/chmod - what do you do to fix this?
    - find the library that controls the chmod command, with ldd, after that call the /lib64/ld-linux-x86-64.so.2 /bin/chmod +x /bin/chmod
- I've lost my root password, what can I do?
    - you can use another administrator account to access and reset, or you can reset the server passing in the grub2 init=/bin/bash and reset the password.
- I've rebooted a remote server but after 10 minutes I'm still not able to ssh into it, what can be wrong?
    - network issues, or some fsck it's running, or some service locked the startup.
- If you were stuck on a desert island with only 5 command-line utilities, which would you choose?
    - cd, vim, cat, awk, find
- You come across a random computer and it appears to be a command console for the universe. What is the first thing you type?
    - lshw
- Tell me about a creative way that you've used SSH?
    - a for loop to send via ssh a command to 50 vms.
    - to connect in an internal deployed gitlab service, using a IPSec VPN connected in a bastion host.
- You have deleted by error a running script, what could you do to restore it?
    - I could copy the file descriptor from the /proc/PID/fd/number_of_file_descriptor into a new file.
- What will happen on 19 January 2038?
    - The standard time libray from C was developed using 4-byte to storage time and 4-byte integer its, a 2 trillion number, that in seconds, translates to January 2038, in that time some mainframes could have some issue, openbsd is already patched.

- Can you explain what SLA means?
    - SLA (Service Level Agreement) defines the level of service expected by a customer from a supplier.
- What's the “five nines” (“nine fives”, “two and a half nines”) uptime?
    - FIve nines measure the 99,999% of availability of a service, meaning that service can be only offline 5.26 minutes in a year.
- What would be the good SLI for an API service? How would you use an SLI to meet the SLO?
    - User latency, error rate are good SLI. Every indicator that measures the user experience it can be a good. Based in the SLI you can change, improve the system or process to follow the SLO.
- What are the SRE Signals?
    - Latency: Or response time, it's the time taken to serve a request. The increase of latency it's key indicator of degradation in an aplication.
    - Traffic: It's the number of requests flowing across your network. Monitoring traffic can help to identify capacity problems and plan ahead future demand.
    - Errors Rate: Indicates the rate of requests that fail, it's important to know when your application it's running with errors, and if they are increasing.
    - Saturation: Measures the usage of a service, and how health is it. CPU, Memory, IO are good metrics, increase of latency it's often a saturation issue.
- True or false, you should always aim to make your service as reliable as it can possibly be?
    - False, you need to keep your service reliable until it's interesting for the end user, to avoid costs.
- Explain the differences between GKE ingress and Nginx Ingress
    - GKE Ingress it a controller that it will spin up a cloud based (GCP in the case) Loadbalancer that will be responsible to intepretate ingress rules defined in your Kubernetes cluster and expose them to the internet.
    - NGINX Ingress it a webserver running as a Ingress Controller inside your kubernetes, that it will interpretate the ingress rules defined and expose them to the internet.

- What are the layers in Docker and why are they useful?
    - Docker layer it's a file generated from running some command during a docker build, and be accessed in the docker host /var/lib/docker/aufs/diff, they can be used as cache.
        - docker history [image name] shows all layers
    - Because of the usage of AUFS (Advanced multi-layered unification filesystem) when docker mounts those layers a diff is applied and layers are reused.
    - Each command in a dockerfile generates a layer diff, so if you install a software with a command uses the same "subshell" to cleanup caches and other files that are not important for the container lifecycle. Only RUN, COPY and ADD creates layers.
- What features of the Linux kernel enable Docker to work?
    - CGroups
    - Namespaces
- What is the difference between the COPY and ADD commands in a Dockerfile?
    - ADD and COPY have the same usage but ADD supports tar and remote url handling, so you can download files or untar directly in the image. But the official documentation suggest uses COPY because of the better control of the output.