

## Unix Interview Questions for Production Support / Application Support

**Question 1: What is Unix?** (100% asked Unix Production Support Interview Questions )

**Answer :**

Unix is a powerful and versatile multi-user, multitasking operating system developed in the late 1960s. It provides a robust command-line interface and forms the basis for many modern operating systems.

**Question 2: Explain the difference between Unix and Linux.**

**Answer :**

Unix is a family of operating systems, including commercial ones, whereas Linux is an open-source Unix-like operating system. An example of Unix is AIX, while Linux includes distributions like Ubuntu and CentOS.

**Question 3: What is a shell in Unix?**

**Answer :**

A shell is a command-line interpreter that allows users to interact with Unix. An example of a Unix shell is the Bourne Shell (`/bin/sh`) or the Bash Shell (`/bin/bash`).

**Question 4: How do you list files in a directory using the command line?**(100% asked Unix Production Support Interview Questions )

**Answer :**

You can use the `ls` command to list files in a directory. For example, to list files in the current directory:

```
```bash
ls
```
```

**Question 5: What is the purpose of the `chmod` command?**(100% asked Unix Production Support Interview Questions )

**Answer :**

The `chmod` command is used to change file permissions in Unix. For instance, to make a file executable, you can use:

```
```bash
chmod +x filename
```
```

**Question 6: Explain the difference between a soft link and a hard link.**

**Answer:**

A soft link (symbolic link) is a reference to a file by its path, while a hard link is another reference to the same file data on disk. Example:

```
```bash
# Creating a soft link
ln -s originalfile softlink

# Creating a hard link
ln originalfile hardlink
```
```

**Question 7: What is a daemon in Unix?**

**Answer :**

A daemon is a background process that runs without user interaction. An example is the `httpd` daemon for serving web pages.

**Question 8: How do you check the disk usage on a Unix system?(100% asked Unix Production Support Interview Questions )**

**Answer :**

Use the `df` command to check disk usage. For example, to display disk usage for all mounted filesystems:

```
```bash
df -h
```
```

**Question 9: Explain the significance of the `/etc/passwd` file.**

**Answer:**

`/etc/passwd` stores user account information, including usernames and encrypted passwords. Here's an example entry:

```
```bash
john:x:1001:1001:John Doe:/home/john:/bin/bash
```
```

**Question 10: What is the purpose of the `grep` command?**

**Answer:**

The ``grep`` command is used to search for text patterns in files. For instance, to find the word "error" in a log file:

```
```bash
grep "error" logfile.log
```
```

**Question 11: How do you kill a running process in Unix?**

Answer :

To terminate a process in Unix, you can use the ``kill`` command followed by the process ID (PID). For example, to kill a process with PID 1234:

```
```bash
kill 1234
```
```

**Question 12: What is the ``cron`` job scheduler in Unix?**

Answer :

``cron`` is a utility in Unix for scheduling tasks to run at specified times. For instance, to schedule a script to run daily at midnight:

```
```bash
0 0 * * * /path/to/script.sh
```
```

**Question 13: Explain the difference between a process and a thread.**

Answer :

A process is an independent program with its own memory space, while a thread is a smaller unit of a process that shares its memory space. Processes are isolated from each other, while threads within the same process share resources. For example, a web server process can have multiple threads handling different client requests concurrently.

**Question 14: How do you redirect the output of a command to a file?**

Answer :

You can redirect the output of a command to a file using the ``>`` operator. For example, to save the output of a command to a file called ``output.txt``:

```
```bash
command > output.txt
```
```

**Question 15: What is the purpose of the ``tar`` command?**

**Answer :**

The `tar` command is used for archiving and compressing files in Unix. For instance, to create a compressed tarball of a directory:

```
```bash
tar -czvf archive.tar.gz directory/
```
```

**Question 16: What does the `ps` command do?**

**Answer :**

The `ps` command is used to list currently running processes. For example, to list all processes running on the system:

```
```bash
ps aux
```
```

**Question 17: How do you set environment variables in Unix?**

**Answer :**

You can set environment variables in Unix using the `export` command. For example, to set the `JAVA\_HOME` environment variable:

```
```bash
export JAVA_HOME=/path/to/java
```
```

**Question 18: What is the `ssh` command used for?**

**Answer :**

The `ssh` command is used for secure remote login and execution of commands on remote machines. For example, to connect to a remote server:

```
```bash
ssh username@remote_server
```
```

**Question 19: Explain the purpose of the `top` command.**

**Answer :**

The `top` command provides real-time information about system processes, memory usage, and CPU usage. It's often used to monitor system performance and identify resource-intensive processes.

**Question 20: How do you check for the existence of a file in a shell script?**

**Answer :**

In a shell script, you can check for the existence of a file using the `-e` flag with the `test` command or the `-f` flag for regular files. For example, to check if a file named `myfile.txt` exists:

```
```bash
if [ -e myfile.txt ]; then
    echo "File exists."
else
    echo "File does not exist."
fi
```
```