

# Linux Interview Questions

A list of top frequently asked **Linux interview questions** and answers are given below.

## 1) What is Linux?

Linux is a UNIX based operating system. Linus Torvalds first introduced it. It is an open source operating system that was designed to provide free and a low-cost operating system for the computer users.

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## 2) What is the difference between UNIX and Linux?

UNIX was originally started as a propriety operating system for Bell Laboratories, which later release their commercial version while Linux is a free, open source and a non-propriety operating system for the mass uses.

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## 3) What is Linux Kernel?

Linux Kernel is low-level system software. It is used to manage the hardware resources for the users. It provides an interface for user-level interaction.

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## 4) Is it legal to edit Linux Kernel?

Yes. You can edit Linux Kernel because it is released under General Public License (GPL) and anyone can edit it. It comes under the category of free and open source software.

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## 5) What is LILO?

LILO is a boot loader for Linux. It is used to load the Linux operating system into the main memory to begin its operations.

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## 6) What is the advantage of open source?

Open source facilitates you to distribute your software, including source codes freely to anyone who is interested. So, you can add features and even debug and correct errors of the source code.

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## 7) What are the basic components of Linux?

Just like other operating systems, Linux has all components like kernel, shells, GUIs, system utilities and application programs.

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## 8) What is the advantage of Linux?

Every aspect comes with additional features, and it provides a free downloading facility for all codes.

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## 9) Define shell

It is an interpreter in Linux.

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## 10) Name some shells that are commonly used in Linux.

The most commonly used shells in Linux are bash, csh, ksh, bsh.

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## 11) Name the Linux which is specially designed by the Sun Microsystems.

Solaris is the Linux of Sun Microsystems.

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## 12) Name the Linux loader.

LILO is the Linux loader.

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13) If you have saved a file in Linux. Later you wish to rename that file, what command is designed for it?

The '**mv**' command is used to rename a file.

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14) Write about an internal command.

The commands which are built in the shells are called as the internal commands.

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15) Define inode.

Each file is given a unique name by the operating system which is called as the inode.

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16) If the programmer wishes to execute an instruction at the specified time. Which command is used?

The '**at**' command is used for the same.

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17) Explain process id.

The operating system uniquely identifies each process by a unique id called as the process id.

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18) Name some Linux variants.

Some of the Linux commands are:

- CentOS
- Ubuntu
- Redhat
- Debian
- Fedora

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## 19) What is Swap Space?

Swap space is used to specify a space which is used by Linux to hold some concurrent running program temporarily. It is used when RAM does not have enough space to hold all programs that are executing.

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## 20) What is BASH?

BASH is a short form of Bourne Again SHell. It was a replacement to the original Bourne shell, written by Steve Bourne.

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## 21) What is the basic difference between BASH and DOS?

- BASH commands are case sensitive while DOS commands are not case sensitive.
  - DOS follows a convention in naming files. In DOS, 8 character file name is followed by a dot and 3 characters for the extension. BASH doesn't follow such convention.
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## 22) What is a root account?

The root account is like a system administrator account. It provides you full control of the system. You can create and maintain user accounts, assign different permission for each account, etc.

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## 23) What is CLI?

CLI stands for Command Line Interface. It is an interface that allows users to type declarative commands to instruct the computer to perform operations.

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## 24) What is the GUI?

GUI stands for Graphical User Interface. It uses the images and the icons which are clicked by the users to communicate with the system. It is more attractive and user-friendly because of the use of the images and icons.

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## 25) Which popular office suite is available free for both Microsoft and Linux?

Open Office Suite is available free for both Microsoft and Linux. You can install it on both of them.

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## 26) Suppose your company is recently switched from Microsoft to Linux and you have some MS Word document to save and work in Linux, what will you do?

Install Open Office Suite on Linux. It facilitates you to work with Microsoft documents.

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## 27) What is SMTP?

SMTP stands for Simple Mail Transfer Protocol. It is an internet standard for mail transmission.

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## 28) What is Samba? Why is it used?

Samba service is used to connect Linux machines to Microsoft network resources by providing Microsoft SMB support.

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## 29) What are the basic commands for user management?

- last,
- chage,
- chsh,
- lsof,
- chown,

- chmod,
  - useradd,
  - userdel,
  - newusers etc.
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### 30) What is the maximum length for a filename in Linux?

255 characters.

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### 31) Is Linux Operating system virus free?

No, There is no operating system till date that is virus free, but Linux is known to have less number of viruses.

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### 32) Which partition stores the system configuration files in Linux system?

/etc partition.

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### 33) Which command is used to uncompress gzip files?

gunzip command is used to uncompress gzip files.

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### 34) Why do developers use MD5 options on passwords?

MD5 is an encryption method, so it is used to encrypt the passwords before saving.

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### 35) What is a virtual desktop?

The virtual desktop is used as an alternative to minimizing and maximizing different windows on the current desktop. Virtual desktop facilitates you to open one or more programs on a clean slate rather than minimizing or restoring all the needed programs.

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### 36) What is the difference between soft and hard mounting points?

In the soft mount, if the client fails to connect the server, it gives an error report and closes the connection whereas in the hard mount, if the client fails to access the server, the connection hangs; and once the system is up, it again accesses the server.

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### 37) Does the Alt+Ctrl+Del key combination work in Linux?

Yes, it works like windows.

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### 38) What are the file permissions in Linux?

There are 3 types of permissions in Linux OS that are given below:

- **Read:** User can read the file and list the directory.
  - **Write:** User can write new files in the directory .
  - **Execute:** User can access and run the file in a directory.
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### 39) What are the modes used in VI editor?

There are 3 types of modes in vi Editor:

- Regular mode or command mode
  - Insertion mode or edit mode
  - Replacement mode or Ex-mode
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### 40) How to exit from vi editors?

The following commands are used to exit from vi editors.

1. **:wq** saves the current work and exits the VI.
2. **:q!** exits the VI without saving current work.

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## 41) How to delete information from a file in vi?

The following commands are used to delete information from vi editors.

1. **x** deletes a current character.
2. **dd** deletes the current line.

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## 42) How to create a new file or modify an existing file in vi?

1. `vi filename`