



Software Development

[Articles](#) [Ebooks](#) [Video Tutorials](#) [On-demand Webinars](#) [Free Practice Tests](#)

[Home](#) [Resources](#) [Software Development](#) [Top 30 Shell Scripting Interview Questions And Answers for 2022](#)

Top 30 Shell Scripting Interview Questions And Answers for 2022

By [Simplilearn](#)

Last updated on Mar 24, 2022

14650



Table of Contents

[Shell Scripting Interview Questions for Beginners](#)

[Shell Scripting Interview Questions for the Intermediate](#)

[Advanced Shell Scripting Interview Questions for the Experienced](#)

[Ace Your Shell Scripting Interview Now](#)

[languages](#) have to offer. Any script, simple to complex, can be developed using Shell scripting. It is a series of [UNIX commands](#) written to accomplish a particular task using a plain text file. Tasks of day-to-day life can be automated with the help of shell scripting.

If you are new to the concepts of Unix, shell, and Perl, read it [here](#). If you have knowledge about shell scripting and have to face a related job interview, then this shell scripting interview questions and answer article will help you with the top shell scripting interview questions that can make your preparation easy.

Shell Scripting Interview Questions for Beginners

Let's get started with some shell scripting interview questions for beginners.

1. What is a superblock in shell scripting?

A superblock is a program containing specific file systems' records. The characteristics available in the block are size, counts of filled and empty blocks, usage information, size of block groups, and location and size of inode tables.

2. What do you understand by a shell?

Shell is a command-line interpreter that translates user-entered commands into kernel understandable language. The shell interprets the command typed in at the terminal and calls the required program.

3. Name commonly used shells on a typical Linux system.

There are mainly two kinds of Linux shells- C-shell and Bourne shell. Their derivatives are as follows:

- C-shell: TENEX C-Shell, Z-Shell
- Bourne shell: Korn Shell, POSIX Shell, Bourne-Again Shell

[VIEW COURSE](#)

4. Tell about the four stages of the Linux Process.

The four stages include:

- Waiting- The Linux process is waiting for the resource
- Running- The Linux process is currently running
- Stopped- The Linux process has been stopped after successful execution
- Zombie- The Linux process is still active in the process table, but it has stopped.

5. How can you connect to a database server?

To connect to a database server from Linux, use the isql utility that comes with the open client driver. Here is how:

```
isql -S serverName -U username -P password
```

6. Give the purpose of the shebang line.

The shebang line is at the top of each script used to determine the engine's location and is used to execute the script.

7. Define Shell Variable.

Shell variable forms the core part of a shell script or program. The variable allows the shell to manipulate the stored information within a shell program. It is generally stored as a string variable.

8. How many kernels and shells are available in the UNIX environment?

There can be multiple shells available, but there is only one kernel in the UNIX environment.

9. What is the alternative command for echo?

The alternative command for echo is tput. This command allows us to control how the output is displayed on the screen.

10. What is a metacharacter?

Metacharacter is a unique character included in a program or data field of a shell. It offers information about other characters. For example: to list all files beginning with character 's,' use the 'ls s*' command.

Shell Scripting Interview Questions for the Intermediate

Here are some intermediate level shell scripting interview questions!

1. Tell us about the disadvantages of shell scripting.

Shell scripting has the following disadvantages:

1. The process is slow initially and improves gradually
2. Portability is not easy
3. Typing errors can partition as well as delete entire data
4. Weak designs can prove to be costly and can destroy the whole process.

2. What do you understand by GUI scripting?

GUI or Graphical User Interface controls a computer and its applications. GUI scripting mostly depends on the operating system and supports different applications.

3. Tell us about the '\$#' use in shell scripting.

'\$#' is used to display the total number of passed arguments to the script.

4. Name standard streams in Linux.

The standard streams in Linux are Standard Input, Standard Output, and Standard Error.

5. Explain Crontab.

Crontab means cron table because the tasks are executed using the job scheduler 'cron.' It is a list of commands that run on a regular schedule, and the name of the command also manages the list. Crontab is the schedule and also the name of the program used to edit the schedule.

6. Differentiate between \$@ and \$*.

\$* considers an entire set of positional arguments as a single string whereas, \$@ treats each quote argument as a separate argument.

7. What is the lifespan of a shell variable?

A variable is inside the shell script only until the end of execution.

8. Tell us how you can compare strings in a shell script.

To compare the text strings, we use the 'test' command. This command compares text strings by comparing each character of each string.

9. When the script is running in the UNIX, can you pass arguments to it?

Yes, arguments can be passed, and it is a commonly followed practice. It is carried out to ensure the system does not have an error in executing commands and scripts run smoothly.

10. Can you separate hard and soft links in shell scripting? How?

Shell scripting is a powerful approach that uses links to create shortcuts, just like Windows. Soft links do not have any specific location and can be anywhere on the same file system, and are generally related to the file name. At the same time, hard links remain present on the same file system. Hard links are related to nodes and have a particular fixed location in most cases.

Advanced Shell Scripting Interview Questions for the Experienced

Here are some shell scripting interview questions for the experienced candidates!

1. Name two files of the crontab command.

The two crontab command files are:

- cron. deny- decides the user that needs to be prevented from using crontab command
- cron. allow- decides the user that needs to be permitted to use the crontab command

2. How will you debug problems encountered in the shell program?

Some standard methods of debugging the problems in the script are:

- use of set-x to enable debugging
- Insert debug statements in a shell script to display information that helps in the identification of the problem.

3. What will be the status of a process executed using the exec command in the shell?

All the new forked processes get overlays on executing exec. The command gets executed without any impact on the current process, and no new process is created in the scenario.

4. Why is bash a weakly typed language?

Bash is a weakly typed language because it does not require declaring **data type** at the time of variable declaration. Bash variables are treated as strings, and the type of variable is set based on the current value. Bash variables can be defined by using declare command. However, to define data types, options are limited and do not support all data types. For example: declare command cannot be used for the float data type.

5. What is the alternative to if-else if-else statements in bash?

An alternative to if-else if-else statement is a case statement. Its syntax is different from switch case. 'case' block is closed by 'esac,' and no break statement is used. Syntax

```
case in
```

```
Match pattern one) commands;;
```

```
Match pattern two) commands;;
```

Add Another Star to Your Performance Evaluation

Learn from industry experts for FREE

START LEARNING

6. How can you print a substring in bash?

Bash does not have a built-in function like other languages. However, a parameter expansion can be used to cut any string value. The three parts defined in parameter expansion are the primary string variable that has to be cut, starting position, and length of the cutting string. The first two are mandatory; the last one is optional. The starting position is counted from 0, and length must be counted from 1 of the main string.

7. Please tell us how you will check if a file exists on the filesystem.

Using the following:

```
if [ -f /var/log/messages ]
```

```
then
```

```
echo "File exists."
```

```
fi
```

8. Use the echo command to get part of a string variable.

This is how we can get part of string variable using echo command only:

```
echo ${variable:x:y}
```

Where X is the starting position and y is the string length.

example:

```
variable="Her name is Jen, and she is a developer."
```

```
echo ${variable:12:6} # will display Jen
```

9. What is the difference between `[[$string == "efg*"]]` and `[[$string == efg*]]` ?

`[[$string == efg*]]` – checks if string begins with efg.

`[[$string == "efg*"]]` – checks if string is efg.

10. In what ways, shell script get input values?

a. By reading command: `read -p "Destination backup Server: " dest host`

b. By parameters: `./script param1 param2`

Are you a web developer or interested in building a website? Enroll for the [Full Stack Web Developer - MEAN Stack Master's Program](#). Explore the course preview!

Ace Your Shell Scripting Interview Now

With the help of these shell-scripting interview questions, you can understand that shell is mainly an interface between the operating system and the user that interprets user-entered commands to the operating system or kernel. Thus, you know the importance of a shell in the operating system and can present your understanding in your next shell scripting interview. You can also enrich your knowledge with [Simplilearn's certification and courses](#). Explore right away!

Find our Post Graduate Program in Full Stack Web Development Online Bootcamp in top cities:

Name	Date	Place
Name Post Graduate Program in Full	Date Cohort starts on 6th Jul 2022,	Place Your City

Stack Web Development	Weekend batch	Hyderabad
Post Graduate Program in Full Stack Web Development	Cohort starts on 21st Jul 2022, Weekend batch	Hyderabad

About the Author



Simplilearn

Simplilearn is one of the world's leading providers of online training for Digital Marketing, Cloud Computing, Project Management, Data Science, IT, Software Development, and many other emerging ...

Recommended Programs

Post Graduate Program in Full Stack Web Development

3278 Learners

Lifetime Access*

Full Stack Web Developer - MEAN Stack

930 Learners

Lifetime Access*

*Lifetime access to high-quality, self-paced e-learning content.

[Explore Category](#)

Find Post Graduate Program in Full Stack Web Development in these cities

Find Post Graduate Program in Full Stack Web Development in these cities

Post Graduate Program in Full Stack Web Development, Ahmedabad | Post Graduate Program in Full Stack Web Development, Bangalore | Post Graduate Program in Full Stack Web Development, Bhopal | Post Graduate Program in Full Stack Web Development, Bhubaneswar | Post Graduate Program in Full Stack Web Development, Chennai | Post Graduate Program in Full Stack Web Development, Delhi | Post Graduate Program in Full Stack Web Development, Dhaka | Post Graduate Program in Full Stack Web Development, Kolkata | Post Graduate Program in Full Stack Web Development, Lucknow | Post Graduate Program in Full Stack Web Development, Mumbai | Post Graduate Program in Full Stack Web Development, Pune | Post Graduate Program in Full Stack Web Development, Vizag

NEXT ARTICLE

Most Frequently Asked Terraform Interview Questions and Answers for 2022

By Simplilearn

89725

Jun 14, 2022

Recommended Resources

Kubernetes
Interview Guide

The Guide for
Beginners to
Learn C++ Shell...

0 Comments **Simplilearn**  **Disqus' Privacy Policy**

 **Login** ▼

 **Favorite**  **Tweet**  **Share**

Sort by Best ▼



Start the discussion...

LOG IN WITH

OR SIGN UP WITH DISQUS 

Name

Be the first to comment.

 **Subscribe**  **Add Disqus to your site** **Add Disqus**  **Do Not Sell My Data**

© 2009 -2022- Simplilearn Solutions

Disclaimer

PMP, PMI, PMBOK, CAPM, PgMP, PfMP, ACP, PBA, RMP, SP, and OPM3 are registered marks of the Project Management Institute, Inc.