

# Difference Between CLI and GUI

The two ways a user can communicate with an electronic device are through a graphical user interface (GUI) and a command line interface (CLI). The table below shows the difference between CLI and GUI based on multitasking, remote accessing, etc.

CLI vs GUI	
CLI	GUI
An interface that allows the user to perform tasks by issuing commands in the form of successive lines of text or command lines.	A user interface that allows users to interact with electronic devices through the use of graphical icons and visual indicators.
The acronym of CLI is the Command line interface.	The acronym of GUI is the graphical user interface.
CLI does not require more memory.	GUI requires more memory because it contains many graphical components.
It is impossible to alter the appearance.	There are options for changing the appearance.
CLI is less flexible.	GUI is more flexible.
The user should be proficient in command syntax.	Even a newcomer can easily manage.

## What is GUI?

User interfaces, also known as graphical user interfaces (GUIs), are visual communication representations that allow users to interact with electronic devices. GUIs frequently combine graphic representations with icons such as menus, cursors, tabs, windows, and scroll bars.

The user communicates with the electronic device by using these graphical icons. We'll see later in this article that using the command-line interface (CLI) isn't the most common way to communicate.

## What is CLI?

A command-line interface (CLI) is a programme that performs operations on an operating system using text input. CLI was the standard way to interact with

computers in the early days of computing. This has changed since the development of the GUI.

System administrators and software developers use command-line interfaces to install software, access features that aren't available in graphical interfaces, and configure computers. Today's CLIs are most commonly found in the Bash shell (for Mac OS and Linux) and MS-DOS (for Windows).

### **Key Difference Between CLI and GUI**

The key difference between CLI and GUI are given below.

- Users can interact with the operating system or application via a graphical user interface. In contrast, a command line interface (CLI) enables users to carry out activities by entering commands in a series of lines of text.
- It is challenging for novice users to use the CLI because the commands must be learned. Professionals often favour CLI. The GUI is easier to use than CLI and can be used by both novices and seasoned professionals.
- Multitasking may or may not be supported by the CLI. On the other hand, multitasking is easy in a GUI. For instance, MS Word and Chrome both support multitasking.
- CLI is faster than GUI.
- Only the system and the keyboard are used when interacting. The GUI, on the other hand, provides more tools to interact with the user.
- CLI is less flexible than GUI.