What is Bash?

From here starts a detailed series of Bash content, sit tight!

Introduction to Bash

Bash is the default Linux shell, a command line interpreter developed by the **GNU** project. It is the free version of the *Bourne Shell*. The name is an acronym for the ***'Bourne-Again Shell'***.

Why Bash?

Bash is an evolved and refined command language which enables you to interact with your operating system. You can type commands for Bash to interpret and execute them.

You might be having a question that why do I have to switch over to the command line from GUI (Graphical User Interface). GUI is rather much easy to use. But I will have to suggest you turn your hand towards the command line for some tasks like file handling, administrative problems, and data manipulation, etc. Inherently, you should use the best tool to perform a certain task.

Common Use Cases of Bash

Following are some of the common applications of Bash:

- File manipulation
- Program execution
- Creating your power tools/utilities
- Automating command input or entry
- Customizing administrative tasks
- Creating simple applications
- Creating customized power utilities

- Printing text

When not to use Bash?

- Need direct access to system hardware or external peripherals
- Need data structures, such as linked lists, graphs or trees
- Need to generate or manipulate graphics or GUIs
- Need native support for multi-dimensional arrays
- Need port or socket I/O
- Extensive file operations (Bash is limited to serial file access, and that only in a clumsy and inefficient line-by-line fashion)
- Where cross-platform portability is required
- Resource-intensive tasks, especially where speed is an important factor (sorting, recursion, hashing, etc.)

In all these complex areas, it is suggested to use a multifunctional scripting language such as *Perl, Python, Ruby* or some high-level programming language like *C, C++, Java*, etc.