

Question 1

Is

Definition:

Is lists files and directories in a folder.

Usage:

By default, Is lists the contents of the current directory. You can also specify a directory or file to list.

Formula

```
bash Is [options] [directory]
```

Examples

Is # lists files in current directory
Is -l # lists files with detailed information (permissions, owner, size, date)
Is /home # lists files in /home directory
Is -a # lists all files including hidden files (starting with .)

Is is used for listing files and directories. By default, it lists the current directory if no directory is specified.

Pwd

Definition:

pwd stands for “print working directory.” It shows the absolute path of the current working directory.

Usage

Use pwd to check our current location in the file system.

Formula

```
pwd
```

Examples

```
bash
```

pwd output might be: /home/username/labs to check current directory before listing its contents
pwd Is

cd

Definition:

cd (change directory) is used to move between directories in the file system.

Usage:

we can navigate using absolute paths (full path from root) or relative paths (from our current location).

Formula:

cd [path-to-directory]

Examples

bash .Move to an absolute path cd /home/username/Documents .Move to a subdirectory inside the current directory cd Pictures .Move up to the parent directory cd .. . Move to the home directory cd ~

Question 2

Variable?

A variable is a name that stores a value, such as text, numbers, or other data, which can be used later in commands or scripts.

How to use a variable:

To use a variable, you assign it a value and reference it using \$ before its name.

Environment variable:

An environment variable is a variable that affects the behavior of the shell or system and is available to all programs and processes started from that shell.

User-defined variable:

A user-defined variable is a variable created by the user to store information temporarily in the current session.

Root directory:

The root directory is the top-most directory in the Linux file system hierarchy, represented by `/`.

Parent directory:

The parent directory is the directory immediately above the current directory in the file system hierarchy.

Current working directory:

The current working directory is the directory you are presently “in” in the shell.

Absolute path:

An absolute path is the full path from the root directory to a file or folder.

Relative path:

A relative path specifies a file or directory relative to your current working directory.

Difference between “Your home directory” and “The home directory”:

Your home directory: The personal directory for your user account (e.g., `/home/username`).

The home directory: The general location where all users’ home directories are stored, usually `/home`.