

# SYSTEM UTILITY COMMANDS

- **date Command:**

**Purpose:**

Display or set the system date and time.

**Usage:**

date [OPTION]... [+FORMAT]

The OPTION flags can be used to format the output according to specific criteria.

The +FORMAT specifies the format in which the date and time should be displayed.

**Examples:**

date "+%Y-%m-%d %H:%M:%S"

**Notes:**

The date command is versatile and can be used for setting the system date and time as well.

- **uptime Command:**

**Purpose:**

Display how long the system has been running, along with system load averages.

**Example:**

uptime

**Notes:**

The output includes the current time, how long the system has been running, the number of users, and system load averages for 1, 5, and 15 minutes.

- **hostname Command:**

**Purpose:**

Display or set the system's hostname.

**Usage:**

hostname [OPTION]... [HOSTNAME]

**Example:**

hostname

**Notes:**

The hostname command shows the current hostname of the system.

The hostname is usually set during the system installation but can be changed as needed.

- **uname Command:**

**Purpose:**

Display system information.

**Usage:**

uname [OPTION]...

**Example:**

uname -a

**Notes:**

Commonly used options include -a to display all system information.

uname provides details about the system kernel, machine architecture, and operating system.

- **which Command:**

**Purpose:**

Locate the executable of a command.

**Usage:**

which COMMAND

**Example:**

which ls

**Notes:**

The which command helps in identifying the location of the executable file associated with a given command.

- **cal Command:**

**Purpose:**

Display a calendar.

**Usage:**

cal [OPTION]... [MONTH] [YEAR]

**Example:**

cal

**Notes:**

The cal command by default displays the calendar for the current month.

Additional options can be used to display specific months or years.

- **bc Command:**

**Purpose:**

An arbitrary precision calculator language.

**Usage:**

bc [OPTION] [file ...]

**Example:**

echo "5 + 3" | bc

**Notes:**

bc is a powerful calculator that supports floating-point arithmetic and can be used for more complex mathematical operations.

It can read from files or standard input.