

# WHAT HAPPENS WHEN YOU TYPE "ls-l \*.c"

When you type the "ls-l \*.c" command on the keyboard, the drive passes it to the shell as a string split into two tokens by removing the whitespace in "ls-l \*.c",; resulting in "ls" and "\*.c". Both are stored as an array of strings. The system then checks whether each component of the tokenized string has an alias. If so, it is tokenized and saved again by removing the whitespace. The "ls" command search happens in \$PATH.

After tokenization, it checks whether or not it is a built in command. Since "ls" is not a built in command, the system finds a program to execute it. The ls executable is found in /usr/ bin/ ls . The ls makes a system call that reads the contents of a directory by listing the files. The metacharacter \* allows the user to sort through the list of files. Having it before the ".c" instructs the system to display only and all files with the ".c" extension. Hence, when you type "ls-l \*.c", the terminal displays a list of C files.