6 How to Use Variables

A variable is a name defined in a makefile to represent a string of text, called the variable's value. These values are substituted by explicit request into targets, prerequisites, recipes, and other parts of the makefile. (In some other versions of make, variables are called macros.)

变量是在 makefile 中定义的名称，用于表示文本字符串，称为变量的值。 这些值被显式请求替换为目标、先决条件、配方和 makefile 的其他部分。 （在某些其他版本的 make 中，变量称为宏。）

Variables and functions in all parts of a makefile are expanded when read, except for in recipes, the right-hand sides of variable definitions using '=', and the bodies of variable definitions using the define directive.

---

makefile 的所有部分中的变量和函数在读取时都会扩展，除了在配方中，使用 "=" 的变量定义的右侧，以及使用 define 指令的变量定义的主体。

Variables can represent lists of file names, options to pass to compilers, programs to run, directories to look in for source files, directories to write output in, or anything else you can imagine.

变量可以表示文件名列表、传递给编译器的选项、要运行的程序、要查找源文件的目录、要写入输出的目录，或者您可以想象的任何其他内容。

A variable name may be any sequence of characters not containing ':', '#', '=', or whitespace. However, variable names containing characters other than letters, numbers, and underscores should be considered carefully, as in some shells they cannot be passed through the environment to a sub-make (see Communicating Variables to a Sub-make). Variable names beginning with '.' and an uppercase letter may be given special meaning in future versions of make.

变量名可以是任何不包含":"、"#"、"="或空格的字符序列。 但是，应仔细考虑包含字母、数字和下划线以外的字符的变量名，因为在某些 shell 中，它们不能通过环境传递给子 make（请参阅将变量传递给子 make）。以'.'和大写字母开头的变量名可能在未来版本的 make 中被赋予特殊含义。

Variable names are case-sensitive. The names 'foo', 'FOO', and 'Foo' all refer to different variables.

变量名区分大小写。 名称 'foo' 、'FOO' 和 'Foo' 都指代不同的变量。

It is traditional to use upper case letters in variable names, but we recommend using lower case letters for variable names that serve internal purposes in the makefile, and reserving upper case for parameters that control implicit rules or for parameters that the user should override with command options (see Overriding Variables).

传统上在变量名中使用大写字母，但我们建议对在 makefile 中用于内部用途的变量名使用小写字母，并为控制隐式规则的参数或用户应使用命令覆盖的参数保留大写字母 选项（请参阅覆盖变量）。

A few variables have names that are a single punctuation character or just a few characters. These are the automatic variables, and they have particular specialized uses. See Automatic Variables.

一些变量的名称是单个标点符号或只有几个字符。 这些是自动变量，它们有特殊的特殊用途。 请参阅自动变量。