

## Parsing Command Line Options (S6)

### Case Statements

- Execute commands based on pattern matching.
  - `case WORD in [PATTERN [| PATTERN]...] COMMANDS ;;]... esac`

### Functions

- function:
  - `function name { COMMANDS ; }` or `name () { COMMANDS ; }`
  - Create a shell function named NAME. When invoked as a simple command, NAME runs COMMANDS in the calling shell's context. When NAME is invoked, the arguments are passed to the function as \$1...\$n, and the function's name is in \$FUNCNAME.
  - Functions have to be defined before usage
- `local <variable>`: makes a variable local
- arguments given to functions can be accessed with positional parameters
- `readonly <variable>` → mark as readonly
- `logger` → to log in system log (/var/log/syslog)

### Parsing Command Line Options with getopt

- Getopts is used by shell procedures to parse positional parameters as options.
  - `while getopts vl:s OPTION`
  - `getopts optstring name [arg]`
  - `${OPTARG}` → to get the command argument value
- Arithmetic expansion:
  - with `(( ... ))`:
    - `NUM=$(( 2+3 ))`
  - with `let` command
    - `let NUM='2+3'`
    - `let NUM++`
  - `expr`
    - `NUM=$(expr 2+3)`

### Finding Files

- `locate` → using database
- `find` → up to date

### Userdel command

- deletes user account and related files

### Archives with tar

- `tar` command

### Disabling Accounts

- `chage` → to change expiration date
- `passwd -l` → lock password(account), ssh-key login still possible