

Summary

1. Variable

`$var/${var}; length = ${#var};`

2. Array

`array_var=(x y z); ${array_var[$index]}; length = ${#array_var[*/@]}; echo ${array_var[*/@]}`

3. Default Variable

`$0` (shell name); `$!` (latest children shell PID); `$$` (current shell PID); `$-` (flag); `$?` (return code for latest command executed, 0 is successful; not 0 is failed)

`$n` (nth parameter); `$@/$*` (parameter list); `$#` (No of parameter)

4. Math Operation

`[$var1 + $var2]; $((($var1 + $var2))`

5. Children Shell

`var = `command`; var = $(command); `command`; (command); echo `command`; echo $(command)`

6. Condition Operation

`[condition] && command` (command executed if condition is true); `[condition] || command` (command executed if condition is false); `commandA && commandB` (B executed if A success); `commandA || commandB` (B executed if A failed)

7. Include

`./xx/file = source /xx/file`

8. Redirect

0 - stdin; 1- stdout; 2- stderr

`command 1>/>> stdout.txt 2>/>> stderr.txt; command >/>> output.txt 2>&1`

`command < file; command <<EOF DATE EOF;`

`'-'` used as stdin parameter, usually in script or function, e.g. `cat -`