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Computational Methods for Systems and Control Theory

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Special Characters and their Meanings in `bash`

`*`	serves as a placeholder for arbitrarily many characters
`?`	a placeholder for a single character
`/`	directory separator
\	escape character for quoting special characters and to mark line breaks
~	abbreviation for your home directory
`|`	the pipe operator: connects two simple commands to a new one by redirecting the output of the one on the left to the other one on the right. `||` represents a logic OR.
`<`	fetches the input for a command (on the left) from a file or device (on the right)
`>`	redirects the output of a command (on the left) to a file or device (on the right)
`2>`	same as above for the error output only, can be used to redirect the standard error messages to standard output so it is recognized by the `>` and `|` as well via `2>&1`
`1>`	same as above for the standard output without the errors
`>>`	as `>` but appends the output instead of overwriting the file
`$`	used in command substitution and for referring to shell and environment variables
`&`	a single `&` after a command name sends the execution to the background. Double `&&` stand for the logic AND.
` ` `	accent grave is used for command substitution
'	single quotes removes the special meaning of all special characters enclosed by them.
"	double quotes act the same as single quotes with the exception of the `$`, ` ` `, \ (and sometimes `!`) characters keeping their special properties.
blank	the simple blank is used to separate words and thus needs to be escaped when, e.g., a file name contains it.
`#`	comment character; everything following this character on the same line will be dropped
`!`	initiates history expansion