Bash Pattern Matching Cheatsheet

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| **Pattern Matching (globs)** | |
| Operator | Function |
| \* | Matches any string including the null. |
| ? | Matches single character |
| [a-zA-Z] | Matches case insensitive letters a - z |
| [0-9a-Z] | Matches case insensitive letters and numbers |
| \*\*/\* | Matches all files and zero or more directories and subdirectories |
| \*\*/\*\* | Matches only directories and subdirectories |
| **Character Classes** | |
| Operator | Function |
| [:alnum:] | Matches alphabetic or numeric characters. This is equivalent to [A-Za-z0-9] |
| [:alpha:] | Matches alphabetic characters. This is equivalent to [a-zA-Z] |
| [:space:] | Matches whitespace characters (space and horizontal tab) |
| [:cntrl:] | Matches control characters |
| [:digit:] | Matches (decimal) digits. This is equivalent to [0-9] |
| [:lower:] | Matches lowercase alphabetic characters. This is equivalent to [a-z] |
| [:upper:] | Matches uppercase alphabetic characters. This is equivalent to [A-Z] |
| [:print:] | Matches characters in the range of ASCII 32 – 126 (printable characters) |
| [:xdigit:] | Matches hexadecimal digits. This is equivalent to [0-9A-Fa-f] |
| ls [[:digit:]] | |
| **Extended Pattern Matching (extended globs)** | |
| Operator | Function |
| \*(pattern) | Matches zero or more occurrences of the given pattern |
| +(pattern) | Matches one or more occurrences of the given pattern |
| ?(pattern) | Matches zero or one occurrence of the given pattern |
| @(pattern) | Matches exaclty one of the given pattern |
| !(pattern) | Matches anything except one of the given pattern |
| ls -d !(\*.html|\*gif|\*jpg) # everything but .html, .jpg or ,gif files  ls file+([0-9]) # list file9, file22 but not fileit | |