Regex Cheatsheet

|  |  |  |  |
| --- | --- | --- | --- |
| **Anchors** | **Description** | **Example** | **Matches** |
| ^ | Matches beginning of line | '^This' | This dog has a tail |
| $ | Matches end of line | 'tail$' | This dog has a tail |

|  |  |  |  |
| --- | --- | --- | --- |
| **Basic Regular Expressions** (sed, grep) | | | |
| Pattern | Match | Pattern | Match |
| . | 1 character | \{2,4\} | 2-4 of previous character |
| \* | 0 or more of previous character | \(ab\) | Match group of chars (ab) |
| \{0,1\} | 0 or 1 of previous character | \(ab\)\{2\} | Multiple groups |
| \{1,\} | 1 or more of previous character |  | |
| \{2\} | 2 of previous character |  | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Extended Regular Expressions** (sed -r, egrep, awk, bash [[ =~ ]]) | | | |
| Pattern | Match | Pattern | Match |
| . | 1 character | {2,4} | 2-4 of previous character |
| \* | 0 or more of previous character | (ab) | Match group of chars (ab) |
| ? | 0 or 1 of previous character | (ab){2} | Multiple groups |
| + | 1 or more of previous character | (cat|dog) | Match cat or dog |
| {2} | 2 of previous character |  | |

|  |  |  |
| --- | --- | --- |
| **BASH\_REMATCH and back references** | | |
| Mechanism | Description | Match |
| [[ photo.jpg =~ ^(.\*)\.([a-Z]\*)$ ]] | Entire string is saved in ${BASH\_REMATCH} | photo.jpg |
| 1st match (.\*) is saved in ${BASH\_REMATCH[1]} | photo |
| 2nd match ([a-Z]\*) is saved in ${BASH\_REMATCH[2]} | jpg |
| egrep '^(.?)(.?).?\2\1$' | Matches in () are saved for recall in back references.  The first match is saved in \1, second in \2 ...  (.?)(.?).?\2\1 = (first)(second)third(second)(first) | radar  civic  kayak |