### Anchors
- `^` Start of string
- `\A` Start of string
- `$` End of string
- `\Z` End of string
- `\b` Word boundary
- `\B` Not word boundary
- `<` Start of word
- `>` End of word

### Quantifiers
- `*` 0 or more
- `+` 1 or more
- `?` 0 or 1
- `{3}` Exactly 3
- `{3,}` 3 or more
- `{3,5}` 3, 4 or 5

### Quantifier Modifiers
- `?` Ungreedy version of "x"

### Groups and Ranges
- `
` Digit
- `
` Not digit
- `
` Word
- `
` Not word
- `
` Hexadecimal digit
- `
` Octal digit

### Character Classes
- `\c` Control character
- `\s` White space
- `\S` Not white space
- `\d` Digit
- `\D` Not digit
- `\w` Word
- `\W` Not word
- `\x` Hexadecimal digit
- `\0` Octal digit

### Pattern Modifiers
- `g` Global match
- `i` Case-insensitive
- `m` Multiple lines
- `s` Treat string as single line
- `x` Allow comments and white space in pattern
- `e` Evaluate replacement
- `U` Ungreedy pattern

### Special Characters
- `\n` New line
- `\r` Carriage return
- `\t` Tab
- `\v` Vertical tab
- `\f` Form feed
- `\xxx` Octal character xxx
- `\xhh` Hex character hh

### Pattern Classes
- `[:upper:]` Upper case letters
- `[:lower:]` Lower case letters
- `[:alpha:]` All letters
- `[:digit:]` Digits and letters
- `[:xdigit:]` Hexadecimal digits
- `[:punct:]` Punctuation
- `[:blank:]` Space and tab
- `[:space:]` Blank characters
- `[:cntrl:]` Control characters
- `[:graph:]` Printed characters
- `[:print:]` Printed characters and spaces
- `[:word:]` Digits, letters and underscore

### Assertions
- `?=` Lookahead assertion
- `?!` Negative lookahead
- `?<=` Lookbehind assertion
- `?!= or ?=!` Negative lookbehind
- `?>` Once-only Subexpression
- `?()` Condition [if then]
- `?()!` Condition [if then else]
- `?#` Comment

### Escape Character
- `\ ` Escape Character

### Metacharacters (must be escaped)
- `^` Start of string
- `[ ]` Character Class
- `{ }` Group
- `\` Escape Character
- `\n` New line

### Pattern Replacements (Backreferences)
- `$n` nth non-passive group
- `$2` “xyz” in “(abc)$xyz”
- `$1` “xyz” in “(?:abc)$xyz”
- `'` Before matched string
- `+` Last matched string
- `&` Entire matched string

### Sample Patterns
- `\w+\.(\w+)(\w+)$` Email addresses
- `^\d+\.[a-z]+$` HTML Tags

### Note:
The above patterns are intended for reference purposes and have not been extensively tested. Please use with caution and test thoroughly before use.