



## Basic Regex Operations

### Finding Text

<b>Find/Search</b>	Locates the first or next occurrence of a specified text or regex pattern.  <b>Example:</b> Ctrl+F (Windows/Linux) or Cmd+F (macOS)
<b>Find All</b>	Highlights or lists all occurrences of a specified text or regex pattern.  <b>Example:</b> Often available in advanced search options.
<b>Incremental Search</b>	Starts searching as you type, immediately jumping to the first match.  <b>Example:</b> Ctrl+I (Emacs)

### Replacing Text

<b>Replace</b>	Replaces the first found occurrence of a pattern with a specified replacement string.  <b>Example:</b> Ctrl+H (Windows/Linux) or Cmd+Option+F (macOS)
<b>Replace All</b>	Replaces all occurrences of a pattern with a specified replacement string.  <b>Example:</b> Usually an option within the Replace dialog.
<b>Replace with Regex</b>	Allows using regular expressions both for finding and replacing text, enabling complex transformations.  <b>Example:</b> Enable regex option in the Replace dialog.

### Common Regex Symbols

<b>.</b>	- Matches any single character (except newline).
<b>*</b>	- Matches zero or more occurrences of the preceding character or group.
<b>+</b>	- Matches one or more occurrences of the preceding character or group.
<b>?</b>	- Matches zero or one occurrence of the preceding character or group (optional).
<b>[]</b>	- Defines a character class; matches any character within the brackets.
<b>()</b>	- Groups characters or patterns; captures the matched group.
<b> </b>	- Acts as an 'or' operator, matching either the expression before or after the pipe.

## Advanced Regex Features

### Character Classes

<b>\d</b>	Matches any digit (0-9).  <b>Example:</b> <b>\d+</b> matches one or more digits.
<b>\w</b>	Matches any word character (a-z, A-Z, 0-9, and underscore).  <b>Example:</b> <b>\w+</b> matches one or more word characters.
<b>\s</b>	Matches any whitespace character (space, tab, newline).  <b>Example:</b> <b>\s+</b> matches one or more whitespace characters.
<b>\D</b>	Matches any non-digit character.  <b>Example:</b> <b>\D+</b> matches one or more non-digit characters.
<b>\W</b>	Matches any non-word character.  <b>Example:</b> <b>\W+</b> matches one or more non-word characters.
<b>\S</b>	Matches any non-whitespace character.  <b>Example:</b> <b>\S+</b> matches one or more non-whitespace characters.

### Anchors

<b>^</b>	Matches the beginning of a line.  <b>Example:</b> <b>^Hello</b> matches lines starting with 'Hello'.
<b>\$</b>	Matches the end of a line.  <b>Example:</b> <b>world\$</b> matches lines ending with 'World'.
<b>\b</b>	Matches a word boundary (the position between a word character and a non-word character).  <b>Example:</b> <b>\bword\b</b> matches the whole word 'word'.

### Quantifiers

<b>{n}</b>	Matches exactly n occurrences of the preceding character or group.  <b>Example:</b> <b>\d{3}</b> matches exactly three digits.
<b>{n,}</b>	Matches n or more occurrences of the preceding character or group.  <b>Example:</b> <b>\d{3,}</b> matches three or more digits.
<b>{n,m}</b>	Matches between n and m occurrences of the preceding character or group.  <b>Example:</b> <b>\d{3,5}</b> matches between three and five digits.

## Text Manipulation Techniques

### Case Conversion

<b>Uppercase</b>	Convert selected text or the entire document to uppercase.  <b>Example:</b> Select text, then use Edit -> Convert to Uppercase (varies by editor).
<b>Lowercase</b>	Convert selected text or the entire document to lowercase.  <b>Example:</b> Select text, then use Edit -> Convert to Lowercase (varies by editor).
<b>Title Case</b>	Convert selected text to title case (capitalize the first letter of each word).  <b>Example:</b> Plugins or extensions might be required.

### Indentation and Formatting

<b>Auto-Indent</b>	Automatically adjusts indentation based on the code structure.  <b>Example:</b> Often triggered automatically or via Edit -> Indent.
<b>Reformat Code</b>	Applies predefined code style rules to the entire document or selection.  <b>Example:</b> Often available through IDE's code formatting options.
<b>Tab/Untab</b>	Insert or remove tabs/spaces at the beginning of lines.  <b>Example:</b> Select lines, then use Tab or Shift+Tab.

### Line Operations

<b>Join Lines</b>	Combine selected lines into a single line.  <b>Example:</b> Often Ctrl+J or Edit -> Join Lines.
<b>Split Lines</b>	Split a line at the cursor position into two lines.  <b>Example:</b> Usually Enter key.
<b>Duplicate Lines</b>	Duplicate the selected lines.  <b>Example:</b> Ctrl+Shift+D (Sublime Text, VS Code).
<b>Delete Line</b>	Deletes the current line.  <b>Example:</b> Ctrl+Shift+K (Sublime Text).

## IDE-Specific Features

### Visual Studio Code

<b>Multi-Cursor Editing:</b> Alt+Click to add multiple cursors for simultaneous editing.
<b>Column (Box) Selection:</b> Shift+Alt+Drag to select text in a column.
<b>Find and Replace:</b> Ctrl+F for find, Ctrl+H for replace, supports regex.
<b>Format Document:</b> Shift+Alt+F to format the entire document.

### Sublime Text

<b>Multi-Selection:</b> Ctrl+Click to add multiple selections for simultaneous editing.
<b>Column Selection:</b> Ctrl+Shift+Up/Down to select text in a column.
<b>Find and Replace:</b> Ctrl+F for find, Ctrl+H for replace, supports regex.
<b>Reindent Lines:</b> Edit -> Line -> Reindent to fix indentation.

### IntelliJ IDEA

<b>Column Selection Mode:</b> Alt+Shift+Insert to toggle column selection mode.
<b>Multiple Cursors:</b> Alt+Click to create multiple cursors.
<b>Find and Replace:</b> Ctrl+F for find, Ctrl+R for replace, supports regex.
<b>Reformat Code:</b> Ctrl+Alt+L to reformat the code.