

String Reference Sheet

By [Duke Hutchings](#) for [CSC 130](#)

Examples: Assume that s, t, and u are Strings and i, j, and k are integers

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|---|---|
| <code>s = "Presidential Debate";</code> | assigns <i>Presidential Debate</i> to s |
| <code>t = "resident";</code> | assigns <i>resident</i> to t |
| <code>u = "";</code> | assigns the empty string to u |
| <code>u = "E";</code> | assigns <i>E</i> to u |
| <code>i = s.indexOf(t, 0);</code> | locates <i>resident</i> inside of <i>Presidential Debate</i> , starting at index 0 (in this example, i would get the value 1) |
| <code>i = s.indexOf(t, 2);</code> | locates <i>resident</i> inside of <i>Presidential Debate</i> , starting at index 2 (in this example, i would get the value -1, indicating "not found") |
| <code>i = s.indexOf(u, 0);</code> | locates <i>E</i> inside of <i>Presidential Debate</i> , starting at index 0 (in this example, i would get the value -1, indicating "not found") (case matters... there is no capital E) |
| <code>u = u.toLowerCase();</code> | converts <i>E</i> to <i>e</i> |
| <code>i = s.indexOf(u, 0);</code> | locates <i>e</i> inside of <i>Presidential Debate</i> , starting at index 0 (in this example, i would get the value 2) |
| <code>i = s.indexOf(u, 3);</code> | locates <i>e</i> inside of <i>Presidential Debate</i> , starting at index 3 (in this example, i would get the value 6) |
| <code>s = t.substring(0, 6);</code> | gets a copy of the characters in <i>resident</i> from index 0 to index 5 (in this example, s gets the value <i>reside</i>) |
| <code>k = s.length();</code> | determines the number of characters in <i>reside</i> (in this example, k would get the value 6) |
| <code>t = s.substring(k-4, k);</code> | gets a copy of the characters in <i>reside</i> from index 2 to index 5 (6-1) (in this example, t gets the value <i>side</i>) |
| <code>s = t.substring(2, 3);</code> | gets a copy of the characters in <i>side</i> from index 2 to index 2 (3-1) (in this example, s gets the value <i>d</i>) |
| <code>u = t + s;</code> | gets a copy of t and a copy of s and joins the copies (in this example, u gets the value <i>sided</i>) |

General Usage and Special Cases on next page

General Usage: Assume that s, t, and u are Strings and i, j, and k are integers

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| <code>k = s.indexOf(t, i);</code> | locates t inside of s, starting at index i k will be -1 if t is not found inside of s k will be 0 if t is found at the front of s |
| <code>t = s.substring(i, j);</code> | gets a copy of the portion of s from index i to index j-1 t will be the empty string if i and j are equal an error occurs if j is less than i an error occurs if j is bigger than the length of s |
| <code>k = s.length();</code> | determines the number of characters in s |
| <code>u = s + t;</code> | gets a copy of s and joins it to a copy of t in technical terms, <i>concatenates</i> s and t |

Special Cases

| | |
|---------------------------------------|--|
| <code>i = s.indexOf(t);</code> | locates t inside of s, starting at index 0 (i.e., the beginning of s) (in this example, i would get the value 1) |
| <code>t = s.substring(i);</code> | gets a copy of s from index i to the end of s an error occurs if i is bigger than the largest index of s an error occurs if i is smaller than 0 |
| <code>t = s.substring(i, i+1);</code> | gets a copy of the character at index i in s (as a string) an error occurs if i is bigger than the largest index of s an error occurs if i is smaller than 0 |