Edit Distance Worksheet

The purpose of this exercise is to get you comfortable with the notation used in the edit distance problem and with the recursive formulation.

Given source string $s = $ kasparov and target string $t = $ karpov. Note that the length of s (denoted $|s|$) is 8 and $|t| = 6$.

1. What does the function call string_compare(s, t, 2, 2) return? (**Hint**: you should be able to answer this by visually inspecting the two strings.)

   "ka" = "ka", so the function returns 0.

2. Suppose that function string_compare returns the following values for three different combinations of i and j:

i	j	output
8	5	4
7	6	4
7	5	3

   Use this to determine the output of string_compare(s, t, 8, 6).

   Substitute s_3 to be an "r" and delete s_5 and s_6.

   returns 3