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Lecture: Autocorrect and Minimum Edit Distance

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Week 1 Minimum edit distance

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Minimum edit distance

Minimum edit distance allows you to:

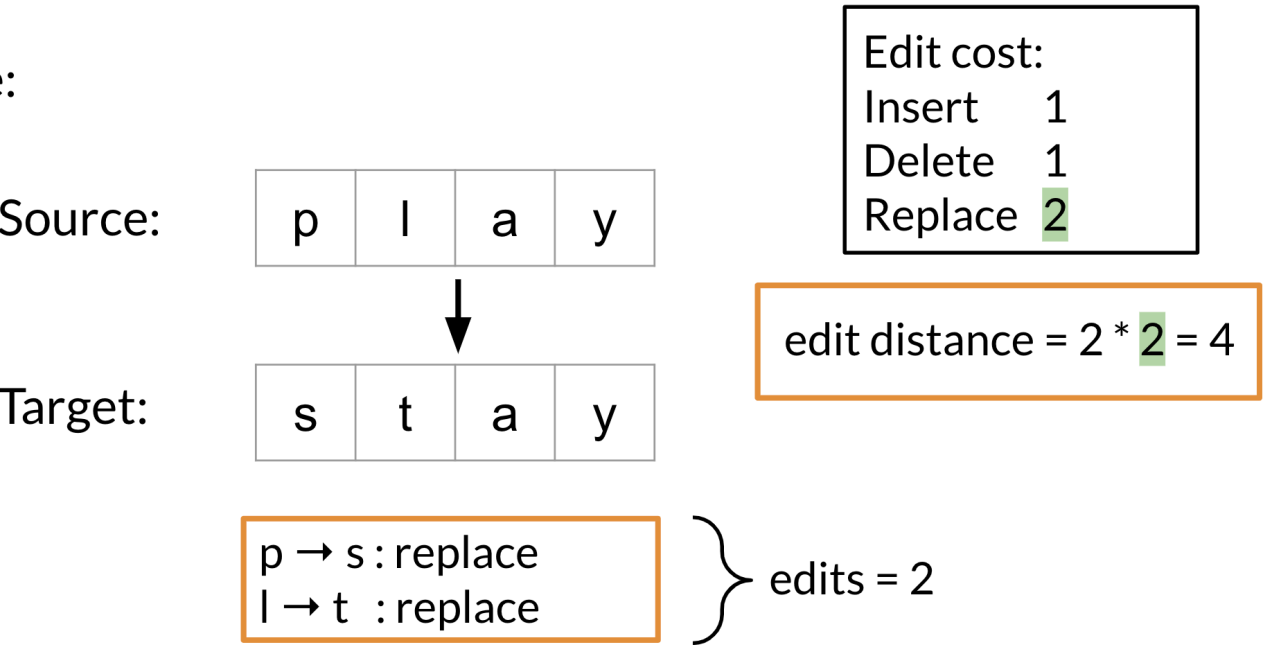
- Evaluate similarity between two strings
- Find the minimum number of edits between two strings
- Implement spelling correction, document similarity, machine translation, DNA sequencing, and more

Remember that the edits include:

- Insert (add a letter) 'to': 'top', 'two' ...
- Delete (remove a letter) 'hat': 'ha', 'at', 'ht'
- Replace (change 1 letter to another) 'jaw': 'jar', 'paw', ...

Here is a concrete example where we calculate the cost (i.e. edit distance) between two strings.

Example:



Note that as your strings get larger it gets much harder to calculate the minimum edit distance. Hence you will now learn about the minimum edit distance algorithm!

