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Lecture: Autocorrect and Minimum Edit Distance

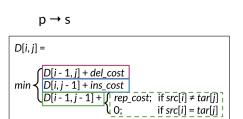
- **⊘ Video:** Intro to Course 2
- ✓ Video: Week Introduction 55 sec
- Video: Overview 1 min
- Reading: Overview 3 min
- Video: Autocorrect
- Reading: Autocorrect 4 min
- **✓ Video:** Building the model 4 min
- Reading: Building the model
- ✓ Lab: Lecture notebook: Building the vocabulary
- **⊘ Video:** Building the model II
- Reading: Building the model II
- Lab: Lecture notebook: Candidates from edits
- **Video:** Minimum edit distance 3 min
- Reading: Minimum edit distance 5 min
- ✓ Video: Minimum edit distance algorithm 5 min
- Reading: Minimum edit distance algorithm 3 min
- ✓ Video: Minimum edit distance algorithm II 4 min
- Reading: Minimum edit distance algorithm II 5 min
- **Video:** Minimum edit distance algorithm III 3 min
- Reading: Minimum edit distance 4 min
- (>) Video: Week Conclusion 51 sec
- ② Ungraded App Item: [IMPORTANT] Have questions, issues or ideas? Join our Community! 10 min

Minimum edit distance algorithm II

To populate the following table:

Search

Source: play → Target: stay Cost: insert: 1, delete: 1, replace: 2



		0	1	2	3	4
		#	S	t	а	у
)	#	0	1	2	3	4
1	[p]	1	2	l I		
2	ı	2				
3	а	3				
1	у	4				

There are three equations:

- **D[i,j] = D[i-1,j] + del_cost:** this indicates you want to populate the current cell (i,j) by using the cost in the cell found directly above.
- $D[i,j] = D[i,j-1] + ins_cost$: this indicates you want to populate the current cell (i,j) by using the cost in the cell found directly to its left.
- **D[i,j] = D[i-1, j-1] + rep_cost:** the rep cost can be 2 or 0 depending if you are going to actually

At every time step you check the three possible paths where you can come from and you select the least expensive one. Once you are done, you get the following:

Source: play → Target: stay Cost: insert: 1, delete: 1, replace: 2

	0	1	2	3	4
	#	s	t	а	у
#	0	1	2	3	4
р	1	2	3	4	5
ı	2	3	4	5	6
а	3	4	5	4	5
у	4	5	6	5	4

Mark as completed

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