

Homework 9

Brian Knotten, Brett Schreiber, Brian Falkenstein

September 14, 2018

4

This problem is essentially the minimum edit distance problem, but with varying weights on operations. Define input to be 2 strings, A and B , of lengths n and m respectively.

```
D = [n + 1, m + 1]
def MED(A, B):
    for i in range(0, n + 1):
        D[0, i] = i
        D[i, 0] = i
    for i in range(1, n + 1):
        for j in range(1, m + 1):
            D[i, j] = min(
                if A[i] == B[i]: D[i-1, j-1]
                else: D[i-1, j-1] + 5
                D[i-1, j] + 3           #deletion
                D[i, j-1] + 4         #insertion
            )
```