

1. DP. $O(nm)$.
2. edit distance is similar to LCS. see the reference for 516. Longest Palindromic Subsequence. $O(\frac{nm}{\log n})$ for constant alphabet size [1].

References

- [1] William J Masek and Michael S Paterson. A faster algorithm computing string edit distances. *Journal of Computer and System sciences*, 20(1):18–31, 1980.