## **Quiz 12. Heuristic Alignment algorithms**

1. If we are searching for the similarity between a query sequence Q of length 100 and the set of 30 sequences of approximately the same length each, and we want to find all the sequences in the set which approximately match sequence Q with maximum 9 differences (insertions, deletions, substitutions)

How can we speed up the search by:

a. Filtration

b. Decreasing the number of DP table cells to be computed