$$\begin{aligned} & \text{H}(i,j) = max \left\{ \begin{array}{ll} & \text{H}(i-1,j-1) + w(a_i,b_j) & \quad \text{Match/Mismatch} \\ & \text{H}(i-1,j) + w(a_i,-) & \quad \text{Deletion} \\ & \text{H}(i,j-1) + w(-,b_j) & \quad \text{Insertion} \end{array} \right\}, 1 \leq i \leq m, 1 \leq j \leq n \end{aligned}$$

$$w(\text{match}) = +2; \quad w(a, -) = w(-, b) = w(mismatch) = -1$$

- $^{\prime}$ A N A N A S
- $\ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0$
- B 0 0 0 0 0 0 0
- A 0 2 1 2 1 2 1
- N 0 1 4 3 4 3 2
- A 0 2 3 6 5 6 5
- N 0 1 4 5 8 7 6
- E 0 0 3 4 7 7 6