

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

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

/	-	A	N	A	N	A	S	S	E
-	0	0	0	0	0	0	0	0	0
B	0	↓	↓	↓	↓	↓	↓	↓	↓
A	0	0	0	0	0	0	0	0	0
N	0								
A	0								
N	0								
E	0								
N	0								