source code:

up_score = scoring_matrix[i - 1][j] + gap_score
left_score = scoring_matrix[i][j - 1] + gap_score
if diagonal_score >= up_score: scoring_matrix Read diagonal_score Read scoring_matrix Read up_score Read scoring_matrix[i - 1] Read scoring_matrix[i] Read >= scoring_matrix[i - 1][j] Read scoring_matrix[i][j - 1] Read gap_score Read gap_score Read + left score up_score Write Write