

Example DP Table Construction

String: "aabcb" (length = 5)

Pattern: "a*b.*b" (length = 6)

dp	""	"a"	"a*"	"a*b"	"a*b*"	"a*b.*"	"a*b.*b"
""	T	F	T	F	T	T	F
"a"	F	T	T	F	T	F	F
"aa"	F	F	T	T	T	T	F
"aab"	F	F	F	T	T	T	F
"aabc"	F	F	F	F	F	T	F
"aabcb"	F	F	F	F	F	F	T

dp[0][0] = true: An empty string matches an empty pattern.

Handling * in Pattern:

For "a*", it can match an empty string (dp[0][2] = true).

For "a*b*", it also matches an empty string (dp[0][4] = true).

For "a*b.*", it can match an empty string (dp[0][6] = true).

Filling the Table:

For each cell, use the rules to check if the current character matches and update based on previous states.

The final value at dp[5][6] indicates whether the entire string "aabcb" matches the entire pattern "a*b.*b".