

DP TABLE

Index	0	1	2	...	i	...	n-1	n
Success	1	$DP[1-1][NO_SUCCESS] * P[1]$ $+ DP[1-1][SUCCESS] * (1 - P[1])$			$+ DP[i-1][NO_SUCCESS] * P[1]$ $+ DP[i-1][SUCCESS] * (1 - P[1])$			
No Success	0	$DP[1-1][SUCCESS] * P[1]$ $+ DP[1-1][NO_SUCCESS] * (1 - P[1])$			$+ DP[i-1][SUCCESS] * P[1]$ $+ DP[i-1][NO_SUCCESS] * (1 - P[1])$			

SUCCESS = 0

NO_SUCCESS = 1