

b)

Subset sum decision problem

$dp(i)(j)$

L represents whether there exists a subset of the first 'i' elements of 's' that sum up to 'j'

$dp[i][0] = \text{True}$ since empty subset sum = 0

if $s[i-1] > j$ then $dp(i)(j) = dp(i-1)(j)$

else

$dp(i)(j) = dp(i-1)(j) \text{ (or) } dp(i-1)(j - s[i-1])$

either include i^{th} element (or) Not

$has(i, c) = dp(i, j)$