H	W	-6
		AND REPORT AND PERSONS ASSESSED.

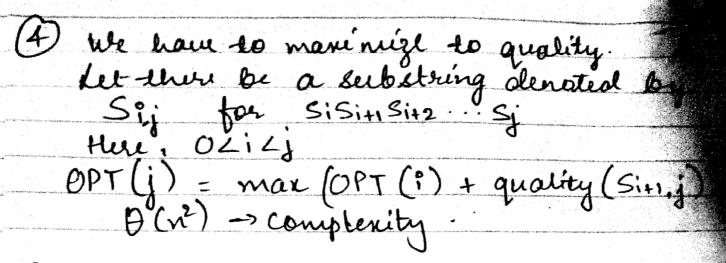
1) There are ndifferent items. For optimal solution, we either choose the item or we don't. Let there be a subproblem with k OPT $(k, w) = \max \begin{cases} opT(k-1, w), \end{cases}$ [OPT (K, W-WK) + VK. Lynance Lyselected add value [0 (wx)] Initial condition: OPT (0,0) = 0

2) Let there be a substring from ith element to jth element. Here, 0<12j

· OPT (j) = max OPT (i)
where sixt, j is
a valid word.

Time complenity: (0 (n2)

(3) We select the balloon to burst at the end. Let that balloon be i So firet me burst all balloons on its left stda, Than its right side. (12 1= 10) OPT (1, 11) = OPT (1, 1-1) + OPT (141, 2) + M[1] x num[1-1] x (0(n3))



(5) Let there be k words in first line from a set of n words; in opt sol. Let OPT(i) be seen of squares of slacks for the optimal solut with words went to wn. Now suppose there are p words at

Now suppose there are p words at present in first line.

OPT(i) = SO if P7, n-(i-i)

min, < k < p {(S(i,k))^2 + OPT (i+k)}

if p < n-(i-i)

Complexity -> pseudo-polynomial.

(4) let there be at least x votess in dist. 1

and y A-votes in dist. 2.

Mlj, p, x, y = true.

Look for entry Mlj, p-1, x-2, y).

Each dist. gets mn/2 votes total.

O(n² m²)