

"I want maximum marks"

0	1	2			n-1
30	99	80			57

All marks are ≥ 0

If you take i you cannot take i+1

#num

0	{}	0	
1	{80}	80	{0}
2	{50, 70}	70	{1}
2	{80, 50}	80	{0}
3	{50, 70, 100}	150	{0, 2}
3	{20, 100, 70}	100	{1}
3	{2, 80, 91}	93	{0, 2}
4	{1, 2, 3, 4}	6	{1, 3}

0 1 2 3

Input: Python list a; ex [1, 2, 3, 4]

e: expected ans: 6

def _test1(self, a: 'list', e: 'int') -> 'void':

ans = [] ans = {1, 3}

maxv = [0] maxv = [6]

work = [0] work = [25] HOW MUCH WORK?

Alg(a, ans, maxv, work, True)

assert(maxv[0] == e)

Question: What courses will you take so that you will get maximum marks

1. You return max marks

2. An array of list of course indices (must be between 0 to n-1)

If you take i you cannot take i+1

3. How much work you did

4. If (show==True) show each step

Time Complexity = ?

Space Complexity = ?