

Michael Hurdus.

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Qing 2 Case 3351

- Q1. Greedy Solution - Use priority Queue with respect to rating.
- The highest rating takes priority.
 - Pop largest and check if it can fit in the day, if it cannot, then pop from the Queue and check again until the day is full or Queue is empty.

Dynamic Solution:

	0.5	1	1.5	2		Rating
WA	WA	PC	MG + PC	MG + PC + WA	WA	1/2 7
GT	WA	PC	MG + PC	MG + PC + WA	GT	1/2 6
MG	WA	MG	MG + PC	MG + PC + WA	MG	1 9
BM	WA	MG	MG + PC	MG + PC + WA	BM	2 9
st. PC	PC	MG	MG + PC	MG + PC + WA	st PC	1/2 8

I started from the left column and compared the current value that could fit in day with the rating of the MG for each call.

For Greedy = If time is also sorted secondarily to rating in an ascending order then the solution would be $MG + PC + WA$, else it could be BM.

Dynamic Solution: The solution is $MG + PC + WA$

Dynamic came up with an optimal solution, because its answer is always the same, but for Greedy, you can't always be sure.

Qo

Common Substring

	c	l	u	e	s
b	0	0	0	0	0
l	0	1	0	0	0
u	0	0	2	0	0
e	0	0	0	3	0

if there is a match

$$f[i][j] = 1 + f[i-1][j-1];$$

else

$$f[i][j] = 0;$$

Common Subsequence

	c	l	u	e	s
b	0	0	0	0	0
l	0	1	1	1	1
u	0	1	2	2	2
e	0	1	2	3	3

if there is a match

$$f[i][j] = 1 + f[i-1][j-1];$$

else

$$f[i][j] = \max(f[i-1][j], f[i][j-1]);$$