Integer Deadline Scheduling

deadline_idx

0 1 2 3 4 5 6 7 8 9 10 11 12

-1 0 1 2 3 4 5 6 7 8 9 10 11

0 1 2 3 4 5 6 7 8 9 10 11

schedule
### Integer Deadline Scheduling

#### Schedule

<table>
<thead>
<tr>
<th>deadline_idx</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1</td>
</tr>
</tbody>
</table>

#### Schedule

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

Add a job: deadline=8, profit = 982
Add a job: deadline=8, profit = 982

Look at deadline_idx[8]
Add a job: deadline=8, profit = 982  Look at schedule[7]
Add a job: deadline=8, profit = 982  It has no job so add it here
Add a job: deadline=8, profit = 982  
Look at deadline_idx[7]
Add a job: deadline=8, profit = 982  
Change deadline_idx[8] to 6
Add a job: deadline=8, profit = 982
Add a job: deadline=6, profit = 891
Add a job: deadline=6, profit = 891

Check deadline_idx[6]
Add a job: deadline=6, profit = 891

No object at schedule[5]
Add a job: deadline=6, profit = 891  
So put it there
Add a job: deadline=6, profit = 891

Look at deadline_idx[5]
Integer Deadline Scheduling

Add a job: deadline=6, profit = 891

Change deadline_idx[6]
Integer Deadline Scheduling

Add a job: deadline=6, profit = 891
Add a job: deadline=5, profit = 824
Add a job: deadline=5, profit = 824

Check deadline_idx[5]
Add a job: deadline=5, profit = 824

No object at schedule[4]
Integer Deadline Scheduling

Add a job: deadline=5, profit = 824 So put it there
Add a job: deadline=5, profit = 824

Look at deadline_idx[4]
Integer Deadline Scheduling

Add a job: deadline=5, profit = 824

Change deadline_idx[5]
Integer Deadline Scheduling

Add a job: deadline=5, profit = 824
Integer Deadline Scheduling

Add a job: deadline=8, profit = 724
Add a job: deadline=8, profit = 724    Check deadline_idx[8]
Integer Deadline Scheduling

Add a job: deadline=8, profit = 724

No object at schedule[6]
Add a job: deadline=8, profit = 724  So put the object there
Add a job: deadline=8, profit = 724
Look at deadline_idx[6]
Integer Deadline Scheduling

Add a job: deadline=8, profit = 724

Change deadline_idx[8]
Add a job: deadline=8, profit = 724
Integer Deadline Scheduling

Add a job: deadline=7, profit = 714
Add a job: deadline=7, profit = 714

Check deadline_idx[7]
Add a job: deadline=7, profit = 714  
Object exists at schedule[6]
Integer Deadline Scheduling

Add a job: deadline=7, profit = 714

So check deadline_idx[6]
Add a job: deadline=7, profit = 714 
Object exists at schedule[4]
Add a job: deadline=7, profit = 714
So check deadline_idx[4]
Add a job: deadline=7, profit = 714

No object exists at schedule[3]
Add a job: deadline=7, profit = 714  So put it there
Integer Deadline Scheduling

Add a job: deadline=7, profit = 714

Look at deadline_idx[3]
Integer Deadline Scheduling

Add a job: deadline=7, profit = 714

Change deadline_idx[4]
Change deadline_idx[6]
Change deadline_idx[7]
Add a job: deadline=7, profit = 714
Add a job: deadline=9, profit = 674
Integer Deadline Scheduling

Add a job: deadline=9, profit = 674  
Check deadline_idx[9]

schedule

Add a job: deadline=9, profit = 674  
Check deadline_idx[9]
Add a job: deadline=9, profit = 674

No object at schedule[8]
Add a job: deadline=9, profit = 674  
So put it there
Add a job: deadline=9, profit = 674

Check deadline_idx[8]
Integer Deadline Scheduling

Add a job: deadline=9, profit = 674  Change deadline_idx[9]
Add a job: deadline=9, profit = 674
Integer Deadline Scheduling

Add a job: deadline=4, profit = 634
Add a job: deadline=4, profit = 634
Check deadline_idx[4]
Add a job: deadline=4, profit = 634

No object exists at schedule[2]
Add a job: deadline=4, profit = 634 So put it there
Integer Deadline Scheduling

Add a job: deadline=4, profit = 634

Look at deadline_idx[2]
Add a job: deadline=4, profit = 634
Change deadline_idx[4]
Integer Deadline Scheduling

Add a job: deadline=4, profit = 634
Integer Deadline Scheduling

Add a job: deadline=9, profit = 586
Add a job: deadline=9, profit = 586  
Check deadline_idx[9]
Add a job: deadline=9, profit = 586 
Object exists at schedule[4]
Integer Deadline Scheduling

Add a job: deadline=9, profit = 586

Check deadline_idx[4]
Add a job: deadline=9, profit = 586

No object exists at schedule[1]
Add a job: deadline=9, profit = 586  So put it there
Add a job: deadline=9, profit = 586

Look at deadline_idx[1]
Integer Deadline Scheduling

Add a job: deadline=9, profit = 586

Change deadline_idx[4]

Change deadline_idx[9]
Add a job: deadline=9, profit = 586