## **Job Sequencing Problem**

Given an array of jobs where every job has a deadline and associated profit if the job is finished before the deadline. It is also given that every job takes the single unit of time, so the minimum possible deadline for any job is 1. How to maximize total profit if only one job can be scheduled at a time.

```
Input: Four Jobs with following
deadlines and profits
JobID Deadline Profit
         4
                  20
  b
         1
                  10
         1
                  40
  c
         1
                  30
Output: Following is maximum
profit sequence of jobs
        c, a
Input: Five Jobs with following
deadlines and profits
JobID
        Deadline Profit
          2
                   100
  b
          1
                   19
          2
                   27
  c
  d
                   25
          1
          3
                   15
  e
Output: Following is maximum
profit sequence of jobs
        c, a, e
```