Week 4

E04-01. Implement algorithms of interval scheduling and give some examples to test it.

Input: n jobs, start time and finish time of each job

Output: maximum subset of mutually compatible jobs.

Example:

Input:

5

0 2

1 4

3 5

4 7

5 6

Output:

3

E04-02. Implement algorithms of interval partitioning and give some examples to test it.

Input: n lectures, start time and finish time of each lecture

Output: the minimum number of classrooms to schedule all lectures.

Example:

Input:

5

0 2

1 4

3 5

4 7

5 6

Output:

2

E04-03. Implement the algorithms of scheduling to minimize lateness and give some examples to test it.

Input: n jobs, processing time and deadline time of each job

Output: job scheduling to minimize maximum lateness.

Example:

Input:

5

1 9

3 6

4 9

2 8

3 14

Output:

1