

## HOMEWORK #2 SOLUTION

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### 1. EXERCISE 2.1 DUAL IN AMPL

### 2. EXERCISE 2.2 SPARSE SOLUTION FOR EQUATIONS WITH AMPL

### 3. BLOODY AMPL

### 4. EXERCISE 2.4 TASK SCHEDULING

The objective of the problem is to minimize the start time of task  $n + 1$ ,  $t_{n+1}$ . For the constraints on start time of each task,  $t_1 = 0$  and  $t_i \geq 0, i \in \mathbb{N}, 2 \leq i \leq n + 1$ . For the precedences between tasks, if task  $j$  must be completed before task  $i$ , namely  $j \in \Psi_i$ ,

### 5. EXERCISE 2.5 INVESTING WISELY