

Netflix

Difficulty level: beginner

Keywords

- Knapsack
- Integer Programming
- Binary tree

Problem description

You have already finished studying and preparing yourself for the maths test scheduled tomorrow. Having two hours and a half of spare time, you decide to watch some episodes of your favourite TV series, listed in Table 1. Since you get bored easily, you usually watch at most one episode of a given TV series, then you switch to another one.

TV Series	Duration (min)
La casa de papel	60
Numb3rs	40
Stranger Things	45
The Defenders	40

Table 1: List of favourite TV series, each one with its duration per episode.

Tasks

1. Which episodes do you choose to watch, in order to exploit at most your spare time?
2. How many combinations of episodes can you do?