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Professor Rachlin

DS3500

7 November 2022

An Evolutionary Approach to TA/Lab Assignments

For our most optimal solution, we found the following to be the best overall choice. Although it holds the same overall penalty score (2) as the other 5 optimal solutions, its penalty comes only from TAs being assigned to "unpreferred" sections. Despite aiming to avoid this, it is by far the best option given that there are no outright issues/conflicts arising at all, only wishes:

Evaluation Scores:

```
groupname, overallocation, conflicts, undersupport, unwilling, unpreferred,
group13,     0,               0,          0,             0,         2,
```

Assigned Sections w/ scores (rows: individual TA, columns: lab section):

LAB_SECTIONS

TAs

```
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 [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
 [0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0]
 [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0]
 [0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0]
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 [0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
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 [1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
 [0 0 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0]
 [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
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 [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]]
```