

CSC 421
Assignment 2
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1)

Code attached.

2)

Variables:

ACAN 225

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. .

CSC 100, CSC 101, CSC 105...CSC 599, CSC 693, CSC 699

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. .

WRIT 100, WRIT 102, WRIT 109...WRIT 590, WRIT 591, WRIT 598

Domains:

{(fall_2016, 1, 08:00-09:00), (fall_2016, 1, 09:00-10:00), ..., (fall_2016, 1, 17:00-18:00),
(fall_2016, 2, 08:00-09:00), (fall_2016, 2, 09:00-10:00), ..., (fall_2016, 2, 17:00-18:00),
(fall_2016, 3, 08:00-09:00), (fall_2016, 3, 09:00-10:00), ..., (fall_2016, 3, 17:00-18:00),
(fall_2016, 4, 08:00-09:00), (fall_2016, 4, 09:00-10:00), ..., (fall_2016, 4, 17:00-18:00),

(spr_2017, 1, 08:00-09:00), (spr_2017, 1, 09:00-10:00), ..., (spr_2017, 1, 17:00-18:00),
(spr_2017, 2, 08:00-09:00), (spr_2017, 2, 09:00-10:00), ..., (spr_2017, 2, 17:00-18:00),
(spr_2017, 3, 08:00-09:00), (spr_2017, 3, 09:00-10:00), ..., (spr_2017, 3, 17:00-18:00),
(spr_2017, 4, 08:00-09:00), (spr_2017, 4, 09:00-10:00), ..., (spr_2017, 4, 17:00-18:00),
}

Constraints:

A. Courses might have prerequisite courses that need to be taken before.

$X.term < Y.term$ where X is a prerequisite of Y .

B. Some courses are offered in certain terms only.

$X.term$ must be a subset of $X.available_terms$ where available terms is all the terms X is available.

C. We want to take not more than 4 courses per term.

$Term1Count < 4$ where $Term1Count$ = the number of courses in that term.

D. Time conflicts should be avoided.
 $X.time \neq Y.time$ where $X.term == Y.term$

3)

Code attached