Homework 07 (50 points)

- Build a (0,1) integer programming model built off of your submission for HW 06 that develops the 2018 NFL schedule.

- Adds the following constraints to the constraints you have already developed (1-10)

- And maximizes game quality across the season

- Add the following constraints:

    11. No team plays 4 consecutive home/away games in a season (treat a BYE game as an away game) (5 points)
    12. No team plays 3 consecutive home/away games in weeks 1,2,3,4,5 and 15, 16, 17 (5 points)
    13. Each team must play at least 2 home/away games every 6 weeks (5 points)
    14. Each team must play at least 4 home/away games every 10 weeks (5 points)
    15. All teams playing away on Thursday night are home the week before (5 points)
    16. Any team playing on Monday night in a given week cannot play Thursday night the next two weeks (5 points)
    17. All teams playing on Thursday night will play at home the previous week (5 points)
    18. No team coming off of a BYE can play Thursday night (5 points)
    19. Week 17 games can only consist of games between division opponents (5 points)
    20. No team playing Thursday night on the road should travel more than 1 time zone away (5 points)

- Constraint names will use the same convention as used for HW06:

    - Constraint names will start with the constraint number (i.e., 11_, 12_, 13_, 14_...20_)
    - Do not mess this up – your grade is counting on it