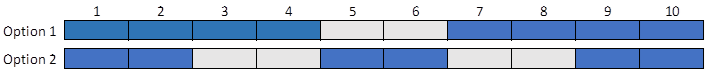
1. In your opinion, what is the single most impactful change the Dodgers can realistically make on the business side within the next three years and why? Explain your current understanding of the status quo, what opportunity for improvement exists, and the process through which the Dodgers could realistically achieve the desired result. Use only data available in the public domain.
2. The Dodgers hold a 50/50 raffle at its home games for which patrons can purchase 5 entries for $10, 20 entries for $20, 100 entries for $40, or 300 entries for $100 to win 50% of the total funds collected (with the other 50% being donated to charity).
   1. Write the algebraic expression to calculate a patron’s expected value of playing the raffle using a maximum of three variables.  Define what each variable represents.
   2. Calculate a patron’s expected value of playing the raffle assuming the following patron buying distribution: 15% purchase five entries for $10, 10% purchase 20 entries for $20, 30% purchase 100 entries for $40, and 45% purchase 300 entries for $100.
3. Entering the 2012 season, MLB adopted a new divisional alignment and Postseason format through which five teams are in each of six divisions (three in each league), each division winner advances to the Postseason, and the two non-division winners with the best records in each league (wild cards) also advance to the Postseason. A tiebreaker game is required in the event any division ends in a tie (two or more ways) or there is a tie (two or more ways) for the final wild card berth in either league. Create a model to calculate the odds of requiring that at least one tiebreaker game be played in a random season and supplement your model with a description of any necessary assumptions or explanations. Use only data available in the public domain. (FYI, 2021 was the final year using this format)
4. Attached is a manifest for a section of seats at Dodger Stadium. Assume that we are in a scenario where we are forced to restrict our capacity and only sell seats in socially-distanced pods. We want the ability to easily look at different configurations to see what would work “best.” For example (pictured below), we could split a 10-seat row into two four-seat-pods with two killed seats between them, or into three two-seat-pods with two killed seats between them.



                With this in mind, please execute the following:

1. Turn the attached pictured section into an actionable dataset
2. Create a tool that outputs a socially-distanced section based on the following inputs:
   1. Size of pods
   2. Number of seats required to be killed between pods within a given row
   3. Number of rows required to be killed between pods (e.g., if one row is required to be killed, you could not have any seat within a pod directly behind a seat within another pod)

For example, if looking at a row of 10 seats, you could input “4” for “a” and “2” for “b” and a possible output would be Option 1 pictured above. In that scenario, the “c” doesn’t matter since you are only looking at a single row.

Please document all assumptions you make when creating the tool, and feel free to use any methodology or software.

1. If you were the hiring manager for this role and in charge of this take-home prompt, and could only ask one question, what question would you ask and why? You cannot choose any of the questions in this prompt as your proposed question.