Homework assignment #3

Part 1: Scheduling problem

Follow IP part 1 and IP part 2 videos, and solve the scheduling problem. Submit your spreadsheet solution.

Part 2: VBA Macros

Follow the video and submit your spreadsheet solution which includes:

1. The Macro for calculating the final scores.

2. The final scores in the designated column.

Part 2: Timeshare Exchange

Prepare the Timeshare Exchange case by filling in the tables on the Excel spreadsheet I shared with you TimeShare_spreadsheet.xlsx.

1) To fill in tables 2, and 3 refer to the customers' submissions and choices original data (A4:G20). Hint: use the functions "If" and "And".
2) To fill in table   int: use the functions "Index" and "

Analyze the Timeshare Exchange case considering the following assumptions:

a) All exchanges are allowed – no matter what c   the customer.
b) There is no difference between top choice an   e that both are equally desirable to a customers who requested them. Hint: use the function "Max".
c) Your objective is to maximize the number of exchanges.
d) Keep in mind that a customer can receive a particular resort/season combination only if someone else gave the same combination up. For example, if customers 1 and 2 are both awarded *Orlando in the winter*, there have to be two other customers who (a) submitted *Orlando in the winter*, **and** (b) received something else in the exchange. Hint: use the function "Sumproduct" to calculate which resort combinations were given up.
e) It is recommended to use a separate sheet for your calculations and model setting.
f) Set your model in Risk Solver and optimize. How many matches have you received?
g) Prepare a table with your final solution (Owner, Awarded resort, Awarded Season). Hint: use the functions "If", "Index" and "Match".
h) Submit your spreadsheet solution.

For reference, see in the box a valid final solution (there are multiple solutions to this problem).

Owner	Resort	Season
1	0	0
2	Horseshoe	Summer
3	Orlando	Winter
4	0	0
5	San Diego	Fall
6	San Diego	Winter
7	0	0
8	Orlando	Winter
9	Orlando	Summer
10	Horseshoe	Summer
11	San Diego	Spring
12	Horseshoe	Winter
13	0	0
14	Horseshoe	Summer
15	Orlando	Fall