Integ ming

Time Share Exc Problem

CIS-418

Time Share Exchange problem

ORLANDO

SAN DIEGO

HORSESHOE

Time Share Exchange problem

- **Objective:**
  - Maximize the number of exchanges
- **Decision variables:**
  - To assign slot x to customer y, 15 customers X 12 combinations
- **Constraints:**
  - Binary Variable [illegible] vet engine, you can set them as non-neg
  - A customer can only receive what i[illegible]nce (based on allowance rule)
  - A customer will not receive a combination that wasn't her first or second choice
  - A customer can receive no more than one combination
  - A customer can receive a particular resort/season combination only if someone else gave the same combination up.

Different business rules

Exchange rules:

- Only same color exchanges are allowed.
- Same color and downward exchanges are allowed. Recall the rank is Red>White>Blue.
- All exchanges are

Customers' satisfaction:

- First choice = Second choice
- First choice = a*Second choice, a>1. We capture customers' satisfaction in objective function.

Go to excel file "Time Share Homework" and solve the problem

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