CSC 421: Assignment 2 - Part B

Q1. (6 points) Nim is a kind of game in which players take turn to removing objects from some initial configuration. A particular version of the Nim is: there is a pile of 13 coins on the table, on each turn, players take either 1, 2, or 3 coins from the pile and put them aside. The objective of the game is to avoid being forced to take the last coin. Using the framework provided in connex, and seeing the TicTacToe game as an example, implement the Nim game.

Q2. (6 points) Consider the bike-riding puzzle from https://www.brainzilla.com/logic/zebra/bike-riding/.

Formulate the problem as CSP, code it, and find the solution, i.e. a consistent assignment for all the variables.

Hint. Use the formulation for the Einstein's Riddle discussed in class as example. Do not forget the uniqueness constraints. Use loops wherever possible to avoid specifying everything manually.