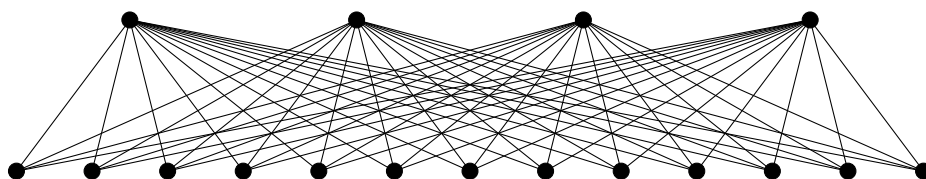# MATH CHALLENGE PROBLEM

for November 2017

Euler's Solitaire

Consider the following solitaire game played with a regular deck of 52 cards: The goal is to lay cards down in a long line, from left to right, so that each card matches either the value or suit of the previous card. However, you may never play three cards in a row that all have the same value or same suit. So, for example, you could start by playing the 3 of diamonds, then the king of diamonds (since they have the same suit), but then you cannot play another diamond so you would need to play a king, maybe the king of clubs, then another club, then another card of that same value that is not a club, and so on.

You win if you play all 52 cards.

The Challenge: Can you win? If not, how long is the longest valid sequence of cards you can form in this game?

Submit solutions to Ross 2239G or oscar.levin@unco.edu by **Friday, December 1**.

The best solution will WIN A PRIZE!
Prizes include nifty Rubik's style puzzle cubes, math puzzle books, math games, even a math coloring book. So submit your answer TODAY!