1. (0 points) READ the syllabus- Content and Policy. What is your name? Write it clearly.

2. (20 points) Alice and Bob are bridge partners. And they cheat! Here is their scheme:

   • If the first card is placed horizontally then the person placing it has 0 or 1 Ace.
   • If the first card is placed Vertically then the person placing it has 2 or 3 or 4 Aces.

In this problem we will both Alice and Bob and also help the bridge community.

   (a) Alice and Bob will be playing 20 games and are worried that their cheating may be discovered. Show how they can use a 1-time pad to make their cheating harder to discover.

   (b) Change something about how Bridge is played so that Alice and Bob cannot use their method to cheat.