CIS 5371 - Cryptography

Writing Exercise: Deadline Tuesday 9/9/2025

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This is an ungraded exercise, but it counts towards your participation. We'll pick some representative papers among your solutions to go over in the writing workshop on Thursday 9/11. Please upload your solution to Canvas by midnight of Tuesday 9/9. Note that your paper should be **anonymous** so that it can be shown to your classmates. Please prepare your solution via Latex. If you have difficulty with Latex, please use office hours; I'm happy to help.

1. (5 points) In class, we learned about the dating problem and the 5-card trick. Prove that the trick protects the privacy of Bob. (Don't include the proof for correctness. You also don't need to re-describe the protocol.)

Note: In Latex, you can write ♥ and ♣ using the commands \heartsuit and \clubsuit respectively.