Discrete Math & Functional Programming— CSCI 054— Spring 2025
Instructor: Osborn
Homework 6 - groupwork (.75 point(s))
Due: 11:59PM on Thursday

1. **[.25 point(s)] Propositional Logic**

   (Problem 3.46 in CDMCS) Consider the propositions $p \Rightarrow (q \Rightarrow q)$ and $(p \Rightarrow q) \Rightarrow q$. One is a tautology and one is not. Which is which? Explain. (One way to explain would be by using a truth table.)

2. **[.25 point(s)] Logical equivalence**

   Prove that the following two propositions are logically equivalent:

   $$(a \wedge b) \Rightarrow (a \wedge c)$$

   $$\neg a \vee \neg b \vee c$$

3. **[.25 point(s)] Group questions** Does anyone in your group have a favorite study snack? If so, what is it?