Math 160 Logic
Assignment # 8

1. Go on to Overleaf and import my latex code. Redo problem 2b in latex.

2. Let A and B be sets. Show that if $B^c \subseteq A^c$ then $A \subseteq B$.

3. Let A and B be sets. Show the following version of Demorgan's Law:

$$(A \cap B)^c = A^c \cup B^c$$

4. Let Λ be a set of indices, and for each $\alpha \in \Lambda$, B_α is a set. Let A also be a set. Prove:

$$A \cup \bigcap_{\alpha \in \Lambda} B_\alpha = \bigcap_{\alpha \in \Lambda} (A \cup B_\alpha)$$