# CSC240 Winter 2024 Homework Quiz 5

due February 9, 2024

A propositional formula $f$ is in *negation normal form* if it is built from literals using only conjunction and disjunction. For instance, all CNF and DNF formulas are in negation normal form.

Give a recursive definition for the set of propositional formulas in negation normal form.

Let $N$ = set of propositional formulas in negation normal form.

Base Case: Set of all literals $\subseteq N$.

Constructor Case: If $f_1, f_2 \in N$, then ($f_1$ AND $f_2$) $\in N$, and ($f_1$ OR $f_2$) $\in N$.