
CS 173 DISCUSSION 8: DAGS, PARTIAL ORDERS, AND UNDIRECTED GRAPHS

Date: October 17/18, 2019.

Problem 1. Let \prec_A be a strict partial order on set A and let \prec_B be a strict partial order on set B . Consider the binary relation $\prec_{A \times B}$ on $A \times B$ defined as

$$(a, b) \prec_{A \times B} (c, d) \text{ IFF } a \prec_A c \text{ AND } b \prec_B d.$$

Prove that $\prec_{A \times B}$ is a strict partial order on $A \times B$.

Problem 2. Are the following pairs of graphs isomorphic?

