# Homework 2

# Distributed Systems

# Monsoon 2024

Due Date: August 16, 2024.

Question 1. Consider a system with four processors and a distributed program with about 15 events.

1. Draw the time diagram for such a program and mark the scalar time of the events. The set of events should include all possible events.
2. Identify events that are logically concurrent.
3. Identify events where strong monotonicity of the scalar time fails.

Question 2. Repeat Question 1(a) and 1(b) with respect to vector time.

Question 3. Show that the timestamps assigned by vector time are strongly consistent.