

QUIZ 2, Section C

Consider a counter initialized to **0**. Only one thread performs **increment operations** on the counter. Each increment operation adds **1** to the counter. However the counter must not exceed **a maximum value of 5**.

1. Draw **Petri net** that models the synchronization and operations for this problem. Clearly label the places and transitions to represent the states and actions of the thread and the counter.
2. Ensure your petri net correctly enforces the following:
 - The counter does not exceed the maximum value of 5.
 - Increment operations are performed atomically.

