Please make sure to not work alone in this activity.

1) A microprocessor gives you an instruction that implements the **TestAndSet** concept as shown in the lecture slide. Using this instruction show the implementation of the **lock** and **unlock** primitives that solve the critical section problem.

2) A microprocessor gives you an instruction that implements the **CompareAndSwap** concept as shown in the lecture slide. Using this instruction show the implementation of the **lock** and **unlock** primitives that solve the critical section problem.