CSC-220– Database Management System- Assignment 3	
CLO-3	Deadline: 19th June, 2022
Class: BSE-4A/4B	Total Marks 5

1. Consider the following two transactions:
   T_1: read(A); read(B); if A = 0 then B := B + 1; write(B).
   T_2: read(B); read(A); if B = 0 then A := A + 1; write(A).

   Add lock and unlock instructions to transactions T_1 and T_2, so that they observe the two-phase locking protocol. Can the execution of these transactions result in a deadlock?

2. Consider the given log. Suppose there is a crash just before the log record<$T0$ abort>is written out. Explain what would happen during recovery.

   > *<T0 start>*
   > *<T0, B, 2000, 2050>*
   > *<T1 start>*
   > *<T1, C, 700, 600>*
   > *<T1 commit>*
   > *<T2 start>*
   > *<T2, A, 500, 400>*
   > *<T0, B, 2000>*
   > *<T0 abort>*
   > *<T2, A, 500>*
   > *<T2 abort>*