

Abstract:

Although some specific mutual exclusion problems have been studied extensively, automatic solutions to synchronize general mutual exclusion problems with arbitrary mutual exclusion constraints have not been fully explored. This paper discusses an Ada 83 solution that can be applied to any general mutual exclusion problem. This solution is based on strong binary semaphores. A generic package is used to generate the solution for an given mutual exclusion problem. An Ada program for the simulation of the classical Dining Philosophers Problem is presented as an example to demonstrate how the solution can be used.

Citation:

Yue, K., An Ada Solution to the General Mutual Exclusion Problem. Ada Letters. vol.13, no.4, pp37-43, 1993.