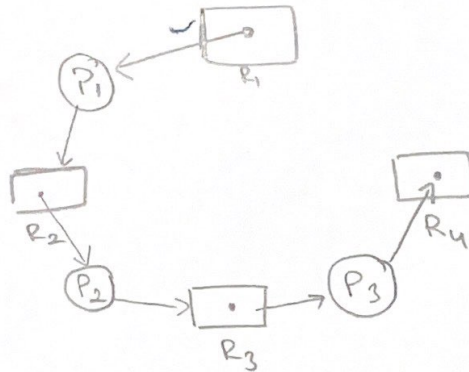


### Problem 4

The system is deadlock free. In the question it says one process needs at most two resources. So each process needs to be holding one resource and requesting (or waiting) for another resource. Since there is 4 resources and 3 processes this condition can be met.



Also, when we draw the graph we can see that there is no cycle. Each process is holding a resource and waiting for another.