# Solutions for Qualifying Examination – Fall 1998
# Operating Systems

1. the answer is simple: the mutual exclusion problem and the hardware allows the gorillas to effectively implement deekers algorithm. the only tricky part is the phone box whcih can only receive calls, not initiate them. it is there to simulate some random interrupt that could occur between the time the gorilla sets its worning light to true and actually gets on the rope (the critical section).

2. This is a simple case of resource allocation and particularly usefule in mananging space on disks and in RAM. the student should be able to draw this conclusio and then respond with at least three well known space allocation algorithms that are well known in OS literature.