

MAT 450 — Operating Systems

Homework #3, Due on Wednesday, April 6, 2005.

In this homework, you are to implement the Sleeping Barber (p233 problem 2.11)

1. A barbershop consists of a waiting room with n chairs and a barber room with one barber chair.
2. The barber does the following in a loop:
 - (a) If there are no customers to be served, the barber goes to sleep.
 - (b) If there is a customer in the barber chair, he cuts its hair.
3. The customer does the following when it enters the barbershop:
 - (a) If the barber is asleep, wake him up and sit in the barber chair.
 - (b) If the barber is busy and all the chairs are occupied, the customer leaves.
 - (c) If the barber is busy but there is an empty chair, the customer sits in one of the empty chairs.