

Assignment 6

Disclaimer: Submit your assignment in the form of a .pdf file which contains solutions to your tasks
Deadline: June 2nd, 2024.

A barbershop consists of a waiting room with n chairs and the barber room containing the barber chair. If there are no customers to be served, the barber goes to sleep. If a customer enters the barbershop and all chairs are occupied, then the customer leaves the shop. If the barber is busy but chairs are available, then the customer sits in one of the free chairs. If the barber is asleep, the customer wakes up the barber. Explain how you would coordinate the barber and the customers by using semaphores and provide a diagram that shows the steps.