In the Name of God

OS Lab #HW4

Cigarette Smokers Problem

There are three smokers and one supplier. Cigarette requires tobacco, paper and match. Each of smokers has only one item with infinite supply. Supplier has the ability to supply all items. The supplier and smokers share a table. The supplier randomly generates two ingredient and place them on the table. the smoker who has the remaining ingredient then makes and smokes a cigarette, signaling the Supplier on completion. The Supplier then puts out another two of the three ingredients, and the cycle repeats.

Write a program that simulates this system, with three smokers and the supplier being simulated by threads. explain your answer in the report.pdf.

Send your answer in a zip file and send it to this email: **s.ahsaei@cse.shirazu.ac.ir**