Assignment 1

Use socket programming in a language of your choice to design the following:

1. A mobile station and a couple of Mobile Switching Centers (MSC).
2. The mobile station is registered to a MSC whose Home Location Register (HLR) contains the relevant entries like mobile # (divided into country code, area code etc.), IMEI #, SIM # etc.
3. Demonstrate that when the mobile station moves from its home MSC to remote MSC, the Visitor Location Register (VLR) of the remote MSC is updated and when the mobile station moves back to the home location, the entry is deleted from the remote MSC's VLR.
4. The Cell number where the mobile station is currently located should also be updated in the relevant register.

Make sure that all the entries made in to the HLR and VLR are valid. The MSCs can be modelled as agents that are continuously listening at some pre-specified ports.