Implementation of Automating Biryani serving

Basic design of code:
- Creating a mutex lock for each table
- Creating a mutex lock for each student
- For each chef creating a thread and in that thread , the chef creates a random number of vessels.
- For each table creating a thread and in that thread creating random number of slots for that table.
- Now students start coming one by one having some delay. For each student creating a thread and in that thread calling wait_for_slot() function.

Explanation of functions:

fill_chef_vessel():

For each chef creating a random number of vessels and that vessel can serve random number of students. Each chef take random amount of time to create these vessels. After preparing all the vessels the biryani_ready() function is called.

biryani_ready():

Each chef which has capacity to fill table checks if there is an empty table . If he finds one ,then he fills it. If all the vessels created by chefs are empty then it call fill_chef_vessel() so that can again cook food.

table_slots():

If all slots created by a table are empty and the table has the capacity to create new slots,then it creates a random amount of slots for that table.

ready_to_serve_table():

While there are some slots in a table that can serve ,it checks if there is any student that needs to be served and serves it and for that student calls student_in_slot().

wait_for_slot():

      When a student enters in mess ,it goes to wait_for_slot() and wait until it gets served.

student_in_slot():

      If a student is served completely , it goes into student_in_slot() and mark itself as served.

Once all the students are done serving , the simulation is ***OVER!!!.***