Boxes in diagram: Agent (x a1), Table (t1 t2 t3 / t4 t5 t6 / t7 t8 t9 / t10 t11 t12), Test (m1, m2, m3, m4), ChefOne (x1), ChefTwo (y1), ChefThree (z1)
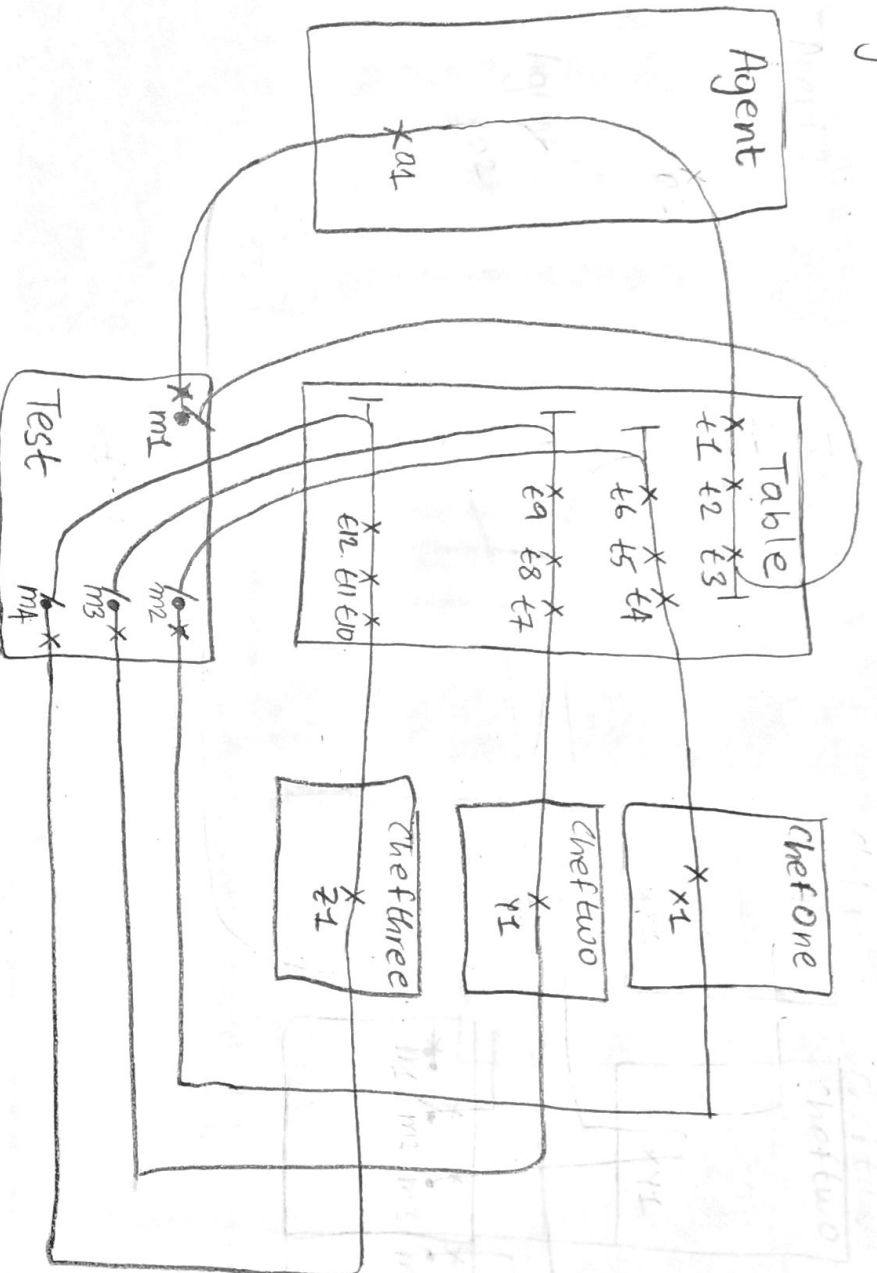
*[a1, t1, t2, t3]
are repeated
20 times

*[m2, x1, t4, t5, t6]
run forever

*[m3, y1, t7, t8, t9]
run forever

*[m4, z1, t10, t11, t12]
run forever

m1: agent thread is started
m2: chefone thread is started
m3: cheftwo thread is started
m4: chefthree thread is started

a1: selects two different random ingredients
t1: places the two selected ingredients
t2: prints ingredients placed on table
t3: notifies all threads

x1: prints ready statement
y1: prints ready statement
z1: prints ready statement

t4: makes & eats sandwich if Bread & penut Butter are present on the table
t5: clears the table if present on the table
t6: notifies all threads
t7: makes & eats sandwich if Bread & jam are present on the table
t8: clears the table
t9: notifies all threads

t10: makes & eats sandwich if penut Butter & jam are present on the table
t11: clears the table
t12: notifies all threads