

ISSUE

In this case , we have to write log history of server and clients. Clients and server have a stack and a queue. A client send element to server queue from stack and queue of clients but some time stack or queue can be full so that we have to write error code.

AIM

Write clients and server log history .

SOLUTION

Firstly, I read first input file and for every line (except first line is number of machines) I make a client (last one is server)which one have stack(with malloc make memory for this stack), queue(with malloc make memory for this queue) ,size of stack ,size of queue, front ,top ,log counter and log(where log handled).Then I make array which name is clients(the array keep clients and server) and with malloc make memory for its. After that I add clients and server to the array .Then I read second input file which one show us what we will do. When I see "A" command in first slot I have to add element(char in third slot) to clients queue so I write a function which one is "void Enqueue(machine_t *m, char eleman)" ,first parameter is client ,second is element,I checked it is full or not ,according to this ,I make adding or passing. if I see "I" command in first command ,I call "push(machine_t *m, char elemant)" this function add element to server's or clients'(number of second slot equal which ones id) stack ,if stack is full ,I handled error 2 otherwise a keep adding.if I see "S" command in first slot a call "void Dequeue(machine_t *m,machine_t *server)" this funtion send element from clients to server so take two parameters first one is client other one is server. Firstly I try to delete element client's stack,if stack is empty i try to client's queue if is also empty ,too .I handled error 3.When i delerte a element from stack or queue I call "void addelemantoServer(machine_t *server,char eleman)" this funtion add element to server's queue if this queue is full ,I write error 1.If i see "O" command in first slot I call "void ServerOP(machine_t *server)" this function parameter is server .The server firstly try to remove element from its stack .if stack is empty, remove progressing passed to server queue its also is empty server handled error 3.

As Finally ,I write log history clients and server to txt file.