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// ITERATIVE SERVER
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <unistd.h>
#include <arpa/inet.h>

#define PORT 2000
#define BUFFER_SIZE 1024

int main() {
    int welcomeSocket, newSocket;
    char buffer[BUFFER_SIZE];
    char reply[BUFFER_SIZE];
    struct sockaddr_in serverAddr;
    struct sockaddr_storage serverStorage;
    socklen_t addr_size;

    welcomeSocket = socket(AF_INET, SOCK_STREAM, 0);
    if (welcomeSocket < 0) {
        perror("Socket creation failed");
        exit(EXIT_FAILURE);
    }

    serverAddr.sin_family = AF_INET;
    serverAddr.sin_port = htons(PORT);
    serverAddr.sin_addr.s_addr = inet_addr("127.0.0.1");
    memset(serverAddr.sin_zero, '\0', sizeof serverAddr.sin_zero);

    if (bind(welcomeSocket, (struct sockaddr *)&serverAddr, sizeof(serverAddr)) < 0) {
        perror("Bind failed");
        close(welcomeSocket);
        exit(EXIT_FAILURE);
    }

    if (listen(welcomeSocket, 5) == 0)
        printf("Listening\n");
    else {
        perror("Listen failed");
        close(welcomeSocket);
        exit(EXIT_FAILURE);
    }

    while (1) {
        addr_size = sizeof serverStorage;
        newSocket = accept(welcomeSocket, (struct sockaddr *)&serverStorage, &addr_size);
        if (newSocket < 0) {
            perror("Accept failed");
            continue;
        }

        memset(buffer, 0, BUFFER_SIZE);
        int rcv_len = recv(newSocket, buffer, BUFFER_SIZE, 0);
        if (rcv_len > 0) {
            printf("Message from Client: %s\n", buffer);

            // Get reply message from server user
            printf("Enter the message to send to Client: ");
            fgets(reply, BUFFER_SIZE, stdin);
            send(newSocket, reply, strlen(reply) + 1, 0);
            printf("Message sent to Client\n");
        } else {
            perror("Receive failed");
        }

        close(newSocket);
    }

    close(welcomeSocket);
    return 0;
}

```