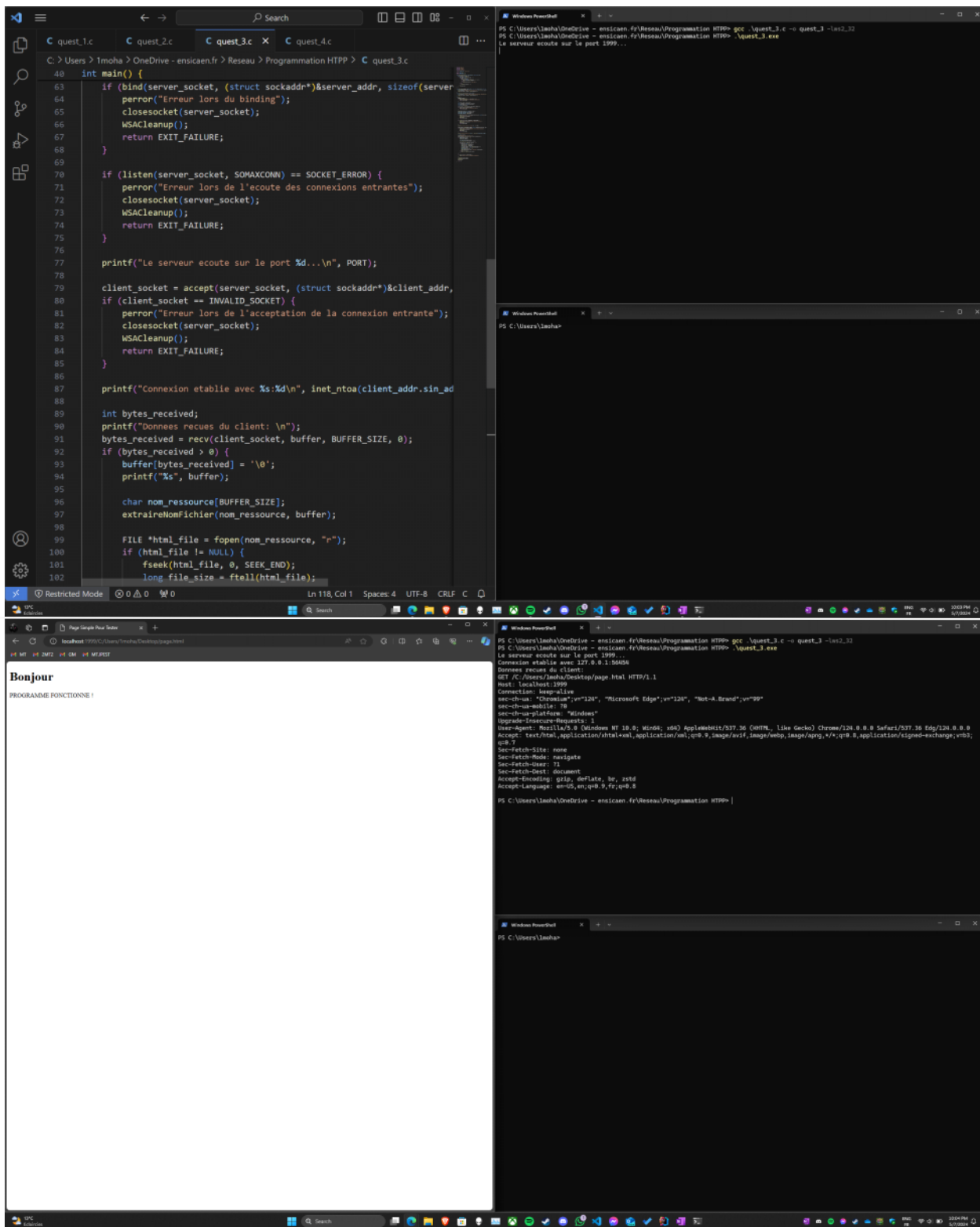


Tuesday, May 7, 2024 9:38 PM

QUESTION 1





Question 4

```
C:\Users\lmoha> OneDrive - ensicaen.fr > Réseau > Programmation HTTP > quest_4.c
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <string.h>
4 #include <winsock2.h>
5
6 #pragma comment(lib, "ws2_32.lib")
7
8 #define PORT 1999
9 #define BUFFER_SIZE 1024
10
11 void extraireNomFichier(char *nom_ressource, const char* req) {
12     char *req_copy = strdup(req);
13     if (req_copy != NULL) {
14         char *token = strtok(req_copy, " ");
15         if (token != NULL) {
16             token = strtok(NULL, " ");
17             if (token != NULL && strcmp(token, "/") != 0) {
18                 strcpy(nom_ressource, token + 1);
19             } else {
20                 strcpy(nom_ressource, "index.html");
21             }
22         } else {
23             strcpy(nom_ressource, "");
24         }
25         free(req_copy);
26     }
27 }
28
29 void send_response(SOCKET client_socket, const char *content_type, const
30 char response[BUFFER_SIZE]) {
31     sprintf(response, "HTTP/1.1 200 OK\r\nContent-Type: %s\r\nContent-Len
32 send(client_socket, response, strlen(response), 0);
33 send(client_socket, content, content_length, 0);
34 }
35
36 void send_error_response(SOCKET client_socket) {
37     char response[] = "HTTP/1.1 404 Not Found\r\nContent-Type: text/html\r
38 send(client_socket, response, strlen(response), 0);
39 }
40
41 const char *get_content_type(const char *filename) {
42
43 }
44
45 int main() {
46     if (listen(server_socket, SOMAXCONN) == SOCKET_ERROR) {
47
48     }
49
50     printf("Le serveur écoute sur le port %d...\n", PORT);
51
52     client_socket = accept(server_socket, (struct sockaddr*)&client_addr,
53 if (client_socket == INVALID_SOCKET) {
54     perror("Erreur lors de l'acceptation de la connexion entrante");
55     closesocket(server_socket);
56     WSACleanup();
57     return EXIT_FAILURE;
58 }
59
60     printf("Connexion établie avec %s:\n", inet_ntoa(client_addr.sin_ad
61
62     int bytes_received;
63     printf("Données reçues du client: \n");
64     bytes_received = recv(client_socket, buffer, BUFFER_SIZE, 0);
65     if (bytes_received > 0) {
66         buffer[bytes_received] = '\0';
67         printf("%s", buffer);
68
69         char nom_ressource[BUFFER_SIZE];
70         extraireNomFichier(nom_ressource, buffer);
71
72         FILE *file = fopen(nom_ressource, "rb");
73         if (file != NULL) {
74             fseek(file, 0, SEEK_END);
75             int file_size = ftell(file);
76             fseek(file, 0, SEEK_SET);
77             char *file_content = (char *)malloc(file_size);
78             fread(file_content, 1, file_size, file);
79             fclose(file);
80             const char *content_type = get_content_type(nom_ressource);
81             send_response(client_socket, content_type, file_content, file
82             free(file_content);
83         } else {
84             send_error_response(client_socket);
85         }
86     }
87 }
```