CN Assignment 6

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CODE:

1. SERVER.C :

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#include <arpa/inet.h>

#define SIZE 1024

void write\_file(int sockfd)

{

int n;

FILE \*fp;

char \*filename = "recv.txt";

char buffer[SIZE];

fp = fopen(filename, "w");

while (1)

{

n = recv(sockfd, buffer, SIZE, 0);

if (n <= 0)

{

break;

return;

}

fprintf(fp, "%s", buffer);

bzero(buffer, SIZE);

}

return;

}

int main()

{

char \*ip = "127.0.0.1";

int port = 7896;

int e;

int sockfd, new\_sock;

struct sockaddr\_in server\_addr, new\_addr;

socklen\_t addr\_size;

char buffer[SIZE];

sockfd = socket(AF\_INET, SOCK\_STREAM, 0);

if (sockfd < 0)

{

perror("[-]Error in socket");

exit(1);

}

printf("[+]Server socket created successfully.\n");

server\_addr.sin\_family = AF\_INET;

server\_addr.sin\_port = port;

server\_addr.sin\_addr.s\_addr = inet\_addr(ip);

e = bind(sockfd, (struct sockaddr \*)&server\_addr, sizeof(server\_addr));

if (e < 0)

{

perror("[-]Error in bind");

exit(1);

}

printf("[+]Binding successfull.\n");

if (listen(sockfd, 10) == 0)

{

printf("[+]Listening....\n");

}

else

{

perror("[-]Error in listening");

exit(1);

}

addr\_size = sizeof(new\_addr);

new\_sock = accept(sockfd, (struct sockaddr \*)&new\_addr, &addr\_size);

write\_file(new\_sock);

printf("[+]Data written in the file successfully.\n");

return 0;

}

1. CLIENT.C :

#include <stdio.h>

#include <stdlib.h>

#include <unistd.h>

#include <string.h>

#include <arpa/inet.h>

#define SIZE 1024

void send\_file(FILE \*fp, int sockfd)

{

int n;

char data[SIZE] = {0};

while (fgets(data, SIZE, fp) != NULL)

{

if (send(sockfd, data, sizeof(data), 0) == -1)

{

perror("[-]Error in sending file.");

exit(1);

}

bzero(data, SIZE);

}

}

int main()

{

char \*ip = "127.0.0.1";

int port = 7896;

int e;

int sockfd;

struct sockaddr\_in server\_addr;

FILE \*fp;

char \*filename = "send.txt";

sockfd = socket(AF\_INET, SOCK\_STREAM, 0);

if (sockfd < 0)

{

perror("[-]Error in socket");

exit(1);

}

printf("[+]Server socket created successfully.\n");

server\_addr.sin\_family = AF\_INET;

server\_addr.sin\_port = port;

server\_addr.sin\_addr.s\_addr = inet\_addr(ip);

e = connect(sockfd, (struct sockaddr \*)&server\_addr, sizeof(server\_addr));

if (e == -1)

{

perror("[-]Error in socket");

exit(1);

}

printf("[+]Connected to Server.\n");

fp = fopen(filename, "r");

if (fp == NULL)

{

perror("[-]Error in reading file.");

exit(1);

}

send\_file(fp, sockfd);

printf("[+]File data sent successfully.\n");

printf("[+]Closing the connection.\n");

close(sockfd);

return 0;

}

OUTPUT:

P.T.O

