

SLIDING WIN

```
#include <stdio.h>

int main() {
    int w, f, i;
    int frames[50];
    printf("Enter window size: ");
    scanf("%d", &w);
    printf("Enter number of frames to transmit: ");
    scanf("%d", &f);
    printf("Enter %d frames: ", f);
    for (i = 1; i <= f; i++)
        scanf("%d", &frames[i]);
    printf("\nWith Sliding Window Protocol, frames are sent as follows:\n");
    printf("After sending %d frames, sender waits for acknowledgement.\n\n", w);
    for (i = 1; i <= f; i++) {
        printf("%d ", frames[i]);
        if (i % w == 0) {
            printf("\nAcknowledgement received for above frames.\n\n");
        }
    }
    if (f % w != 0) {
        printf("\nAcknowledgement received for above frames.\n");
    }
    return 0;
}
```

}

GO BACK N

```
#include <stdio.h>

int main() {
    int windowHeight, sent = 0, ack, i;
    printf("Enter window size: ");
    scanf("%d", &windowHeight);
    while (1) {
        for (i = 0; i < windowHeight; i++) {
            printf("Frame %d has been transmitted.\n", sent);
            sent++;
        }
        printf("\nEnter last acknowledgement received: ");
        scanf("%d", &ack);
        if (ack == sent)
            break;
        else
            sent = ack;
        printf("\n--- Sender retransmitting from frame %d --\n", sent);
    }
    printf("\nAll frames successfully acknowledged.\n");
    return 0;
}
```

CLIENT

```
#include <stdio.h> #include <string.h> #include <sys/socket.h> #include <arpa/inet.h> #include <unistd.h>

int main() { int socket_desc, client_sock, c; struct sockaddr_in server, client; char message[200]; socket_desc = socket(AF_INET, SOCK_STREAM, 0); server.sin_family = AF_INET; server.sin_addr.s_addr = INADDR_ANY; server.sin_port = htons(8080); bind(socket_desc, (struct sockaddr *)&server, sizeof(server)); listen(socket_desc, 3); c = sizeof(struct sockaddr_in); client_sock = accept(socket_desc, (struct sockaddr *)&client, (socklen_t *)&c); strcpy(message, "Hello Client"); write(client_sock, message, strlen(message)); close(client_sock); close(socket_desc); return 0; }
```

```
}
```

SERVER

```
#include <stdio.h>
#include <string.h>
#include <sys/socket.h>
#include <arpa/inet.h>
#include <unistd.h>

int main(){
    int sock;
    struct sockaddr_in server;
    char server_reply[200];
    sock = socket(AF_INET,
    SOCK_STREAM, 0);
    server.sin_addr.s_addr =
    inet_addr("127.0.0.1");
    server.sin_family = AF_INET;
    server.sin_port = htons(8080);
    connect(sock, (struct
    sockaddr *)&server,
    sizeof(server));
    recv(sock, server_reply,
    sizeof(server_reply), 0);
    printf("Server
    Response: %s\n",
    server_reply);
    close(sock);
    return 0;
```