

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 windowSize, sent = 0, ack, i;

printf("Enter window size: ");

scanf("%d", &windowSize);

while (1) {

for (i = 0; i < windowSize; 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;
```