

## **Assignment No.9**

### **Title:**

Write a program using UDP Sockets to enable file transfer (Script, Text, Audio and Video one file each between two machines).

### **Theory:**

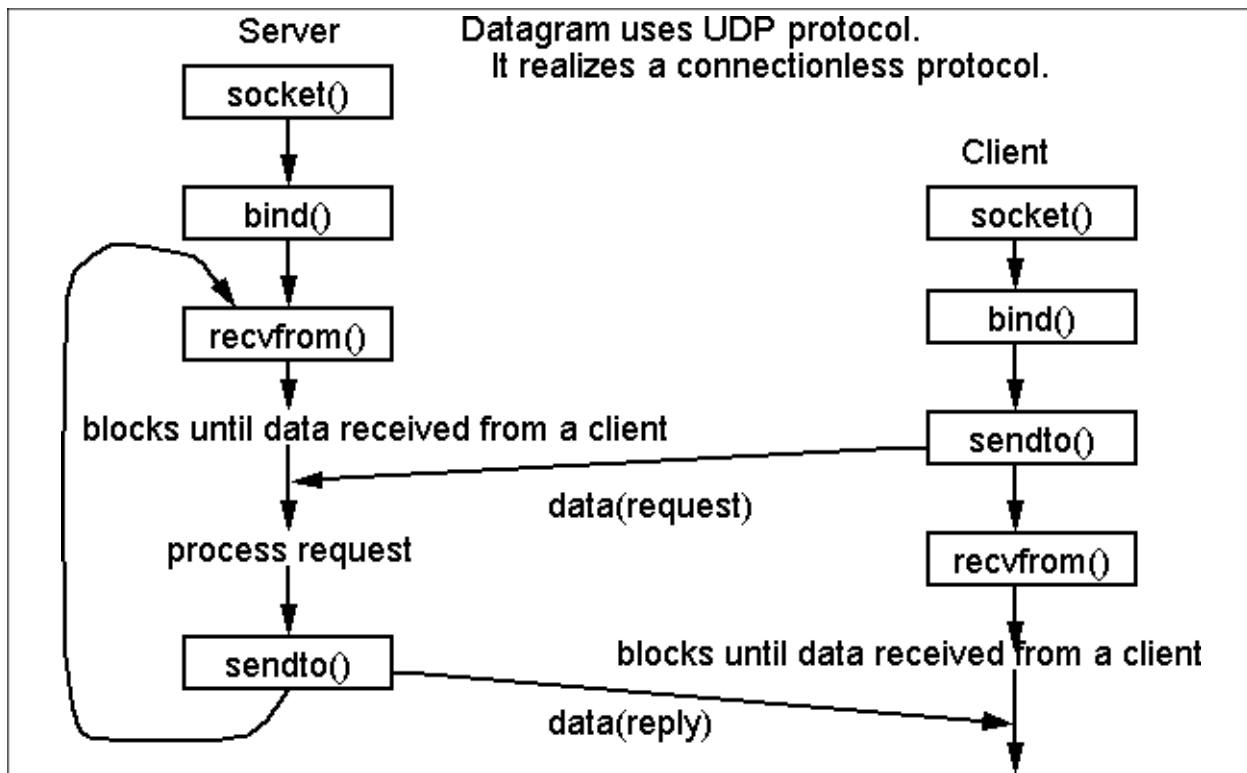
#### **Server-Client file transfer using UDP**

##### **Server:**

- Include appropriate header files.
- Create a UDP Socket using socket() system call.
- Fill in the socket address structure (with server information)
- Specify the port where the service will be defined to be used by client.
- Bind the address and port using bind() system call
- Receive a file name of text, audio or video from the Client using recvfrom() system call.
- Sends file to client using sendto() system call.
- Close the server socket
- Stop

##### **Client:**

- Include appropriate header files.
- Create a UDP Socket.
- Fill in the socket address structure (with server information)
- Specify the port of the Server, where it is providing service
- Send a file name to the server using sendto() system call.
- Receive a file from the Server using recvfrom() system call.
- Close the client socket
- Stop



### Socket functions for UDP client/server in Connectionless Scenario

#### Testing

1. Run Wireshark tool
2. Run client and server program
3. Send and receive file
4. Capture UDP packets in Wireshark

#### Conclusion:

Hence we have studied UDP Socket Programming in C for file transmission of text, audio and video and captured UDP packets in Wireshark too