LABORATORY PROGRAM – 15(B)

Using UDP sockets, write a client-server program to make client sending the file name and the server to send back the contents of the requested file if present.

Code: ClientUDP.py

```
from socket import *
serverName = "127.0.0.1"  # Server address (localhost)
serverPort = 12000  # Port number where the server listens

# Create UDP socket
clientSocket = socket(AF_INET, SOCK_DGRAM)

# Ask user for file name to request
sentence = input("Enter file name: ")

# Send the file name to the server using UDP clientSocket.sendto(sentence.encode("utf-8"), (serverName, serverPort))

# Receive file contents from the server
fileContents, serverAddress = clientSocket.recvfrom(2048)

# Print the file contents received from the server
print("From Server:", fileContents.decode())

# Close the UDP socket
clientSocket.close()
```

Code: ServerUDP.py

```
from socket import *
serverPort = 12000  # Port number to listen on

# Create UDP socket
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind(("127.0.0.1", serverPort))  # Bind the socket to the server address and port

print("The server is ready to receive")

while True:
    # Receive file name from the client
    sentence, clientAddress = serverSocket.recvfrom(2048)

    # Try opening the file
try:
```

```
        file = open(sentence.decode(), "r")  # Open file in read mode        fileContents =
file.read(2048)  # Read file content (up to 2048 bytes)
serverSocket.sendto(fileContents.encode("utf-8"), clientAddress)  # Send file contents to
client        file.close()     except FileNotFoundError:
    # Send error message if file not found
    serverSocket.sendto("File not found".encode("utf-8"), clientAddress)
```

Output