Experiment 16:

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.

	Page O		7-1
+	UBP Sockets		
1	UPI CONTRACTOR OF THE PROPERTY		Sear
1	Client UDP-py		
1	from socket import *		Th
1	Server Name = "127-0.0.1"		
	Part - 12000	6 34	Ser
	clientSocket = 44xg Socket (AF-INET, 30 CK-DGRAM)		The
	sentence = input ("In Inter file name: ")	Jank	
	client Socket-connect send to (bytes (sentence, "uff-8"),	100 3	die
	(serverName, serverPort))		VV.
		345	En
	file contents, server Address = client Socket. geer from (2048)		Rep
	psint ("In Reply from Server, In")		Fo
	print (file contents decode ("utf-8"))		
	7.000 \$ 900 \$		(
	Client Socket, close ()		
			100
-			
(aride of	Server VDP- py		4000
	The second secon		
	from socket import *		00 30
	Server Port = 12000		
	Server Socket = socket (AF-INET, SOCK_DGIRAM)		
	server Socket. bind (("127-0-0-1", serverPort))		
	Print ("The Serva is oready to succeive")		
	while 1:		
	sentence elient Address = server Socket . recyfrom (2048)		
	Senunce - senunce. decode ("utf-8")		
	file = open (sentence, "2")		
	con = file-read (2048)		
	Server Socket-Sendto (+tal " " " " " " " " " " " " " " " " " " "		
	Server Socket. Send to (Lytes (con, "utj-8"), client Aldress)		
	point (in sent contents of ' end = 11)		
	Print (Sentence)		
	file.close()		

3		classmate Date Pege
		Server Side.
		The Server side is neady to neceive
	4 35	Sent Contents of ServerUDP.py The server is neady to neceive.
	des	to have been shown by the bearing on the bearing of
.))	And A	Client Side
(8)	30	Enter the name: Server UPP-py
		Reply from Server: Forom socket import +
		(Code of Seeve VPP. py as written above)
	neit+	- select our so was returned , go to when her
1	3	The Market ages they all at a
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Screenshots:

```
from socket import *
serverName = '127.0.0.1'
serverPort = 12000
clientSocket = socket(AF_INET,SOCK_DGRAM)

filename = input("Enter filename: ")

clientSocket.sendto(bytes(filename, "utf-8"), (serverName, serverPort))

fileContents, serverAddress = clientSocket.recvfrom(2048)
print("\nFile contents: \n")
print(fileContents.decode("utf-8"))

clientSocket.close()
```

```
from socket import *
serverName = '127.0.0.1'
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind((serverName, serverPort))

while 1:
print("Server is listening")
filename, clientAddress = serverSocket.recvfrom(2048)
filename = filename.decode("utf-8")

file = open(filename, "r")
fileContents = file.read(2048)
serverSocket.sendto(bytes(fileContents, "utf-8"), clientAddress)
print("\nSent file contents of file " + filename)
file.close()
```

Output:

```
PS D:\BMSCE\Academics\Semester IV\Computer networks\Lab\UDP> python client.py
Enter filename: server.py
File contents:
from socket import *
serverName = '127.0.0.1'
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind((serverName, serverPort))
while 1:
    print("Server is listening")
    filename, clientAddress = serverSocket.recvfrom(2048)
    filename = filename.decode("utf-8")
    file = open(filename, "r")
    fileContents = file.read(2048)
    serverSocket.sendto(bytes(fileContents, "utf-8"), clientAddress)
    print("\nSent file contents of file " + filename)
    file.close()
PS D:\BMSCE\Academics\Semester IV\Computer networks\Lab\UDP>
```

```
PS D:\BMSCE\Academics\Semester IV\Computer networks\Lab\UDP> python server.py
Server is listening

Sent file contents of file server.py
Server is listening
```