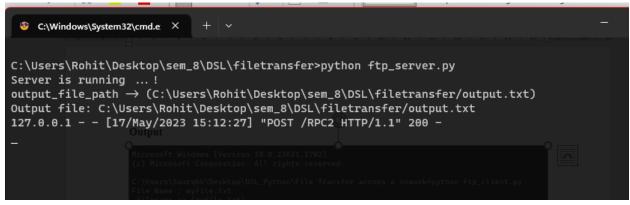# Name : Rohit Telgote

PRN : 1941054

Batch : B2

 # Aim : Implement RPC mechanism for a file transfer across a network.

Program

ftp_client.py

```python
import os
import sys
import xmlrpc.client


#Put your server IP here


url = 'http://{}:{}'.format("192.168.1.9", 8000)
###server_proxy = xmlrpclib.Server(url)
client_server_proxy = xmlrpc.client.ServerProxy(url)


curDir = os.path.dirname(os.path.realpath(__file__))
filename = input("File Name : ")
fpn = curDir + '/' + filename
print(' filename -> ({})'.format(filename))
print(' fpn -> ({})'.format(fpn))
if not os.path.exists(fpn):
    print('Missing file -> ({})'.format(fpn))
    print("Transfer Unsuccessfull")
    sys.exit(1)

with open(fpn, "rb") as handle:
```
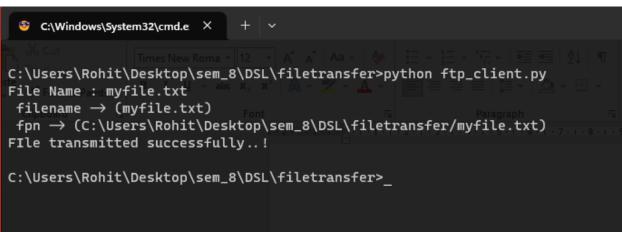
```python
        binary_data = xmlrpc.client.Binary(handle.read())
        client_server_proxy.server_receive_file(binary_data, filename)
        print("FIle transmitted successfully..!")
```

ftp_server.py

```python
from xmlrpc.server import SimpleXMLRPCServer

import os

# Put in your server IP here

server = SimpleXMLRPCServer(("192.168.1.9",8000))

def server_receive_file(arg, filename):
    curDir = os.path.dirname(os.path.realpath(__file__))
    output_file_path = curDir + '/' + 'output.txt'
    print('output_file_path -> ({})'.format(output_file_path))
    with open(output_file_path, "wb") as handle:
        handle.write(arg.data)
        print('Output file: {}'.format(output_file_path))
        return True

server.register_function(server_receive_file, 'server_receive_file')
print('Server is running ...!')
server.serve_forever()
```

Output


```
C:\Users\Rohit\Desktop\sem_8\DSL\filetransfer>python ftp_server.py
Server is running ...!
output_file_path → (C:\Users\Rohit\Desktop\sem_8\DSL\filetransfer/output.txt)
Output file: C:\Users\Rohit\Desktop\sem_8\DSL\filetransfer/output.txt
127.0.0.1 - - [17/May/2023 15:12:27] "POST /RPC2 HTTP/1.1" 200 -
_
```



```
C:\Users\Rohit\Desktop\sem_8\DSL\filetransfer>python ftp_client.py
File Name : myfile.txt
 filename → (myfile.txt)
 fpn → (C:\Users\Rohit\Desktop\sem_8\DSL\filetransfer/myfile.txt)
FIle transmitted successfully..!

C:\Users\Rohit\Desktop\sem_8\DSL\filetransfer>_
```


Name	Date modified	Type	Size
file_transfer_across_network_RPC	17-05-2023 03:07 PM	Microsoft Word D...	83 KB
ftp_client	17-05-2023 03:11 PM	Python Source File	1 KB
ftp_server	17-05-2023 03:11 PM	Python Source File	1 KB
myfile	17-05-2023 03:07 PM	Text Document	1 KB
output	17-05-2023 03:12 PM	Text Document	1 KB