

Receiver:

```
import socket

def receive_file(port):
    # Create a UDP socket
    sock = socket.socket(socket.AF_INET, socket.SOCK_DGRAM)
    sock.bind(('', port))
    print(f'Listening for incoming files on port {port}...')

    # Receive file information
    data, addr = sock.recvfrom(1024)
    filename, filesize = data.decode().split(':')
    filesize = int(filesize)

    with open(filename, 'wb') as f:
        print(f'Receiving {filename}...')
        bytes_received = 0

        while bytes_received < filesize:
            data, addr = sock.recvfrom(1024) # Receive in chunks
            f.write(data)
            bytes_received += len(data)

    print(f'File {filename} received successfully.')
    sock.close()

if __name__ == '__main__':
    port = int(input("Enter the port to listen on: "))
    receive_file(port)
```

Sender:

```
import socket
import os

def send_file(filename, host, port):
    # Create a UDP socket
    sock = socket.socket(socket.AF_INET, socket.SOCK_DGRAM)

    # Get file size
    filesize = os.path.getsize(filename)
    sock.sendto(f'{filename}:{filesize}'.encode(), (host, port))

    with open(filename, 'rb') as f:
        print(f'Sending {filename}...')
        bytes_sent = 0

        while bytes_sent < filesize:
            data = f.read(1024) # Read in chunks
```

```
sock.sendto(data, (host, port))
bytes_sent += len(data)

print(f"File {filename} sent successfully.")
sock.close()

if __name__ == "__main__":
    target_host = input("Enter the receiver's IP address: ")
    target_port = int(input("Enter the receiver's port: "))

    # Choose a file to send
    filename = input("Enter the file path to send (Text, Audio, Video, or Script): ")
    send_file(filename, target_host, target_port)
```

Output:

Receiver:

python cns9_receiver.py

Enter the port to listen on: 5000

Listening for incoming files on port 5000...

Receiving test.txt...

File test.txt received successfully.

Sender:

\$ python cns9_sender.py

Enter the receiver's IP address: 127.0.0.1

Enter the receiver's port: 5000

Enter the file path to send: test.txt

Sending test.txt...

File test.txt sent successfully.