

Assignment-B9 (UDP Protocol) – Output

Code

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

```
$ python3 Code-B9\ \ (Receiver\).py
Enter the port to listen on: 8080
Listening for incoming files on port 8080...
Receiving /home/overnion/Downloads/compress_video.sh...
File /home/overnion/Downloads/compress_video.sh received successfully.
```

Sender

```
$ python3 Code-B9\ \ (Sender\).py
Enter the receiver's IP address: 192.168.196.39
Enter the receiver's port: 8080
Enter the file path to send (Text, Audio, Video, or Script): /home/overnion/Downloads/compress_video.sh
Sending /home/overnion/Downloads/compress_video.sh...
File /home/overnion/Downloads/compress_video.sh sent successfully.
```