# UDP Chat Client

# Prompt for server IP and port

$serverIP = Read-Host "Enter the server IP address"

$port = Read-Host "Enter the UDP port number"

# Create UDP client

$udpClient = New-Object System.Net.Sockets.UdpClient

# Connect to the server

$udpClient.Connect($serverIP, $port)

Write-Host "Connected to server at $serverIP`:$port"

Write-Host "Type your messages and press Enter to send. Type 'exit' to quit."

$lineNumber = 1

while ($true) {

# Get user input

$message = Read-Host "You"

if ($message -eq "exit") {

break

}

# Add timestamp and line number to the message

$timestamp = Get-Date -Format "yyyy-MM-dd HH:mm:ss"

$formattedMessage = "[$timestamp] #$lineNumber $message"

# Send message

$bytes = [Text.Encoding]::ASCII.GetBytes($formattedMessage)

$udpClient.Send($bytes, $bytes.Length)

# Display sent message with timestamp and line number

Write-Host "Sent: $formattedMessage"

# Receive response

$remoteEndPoint = New-Object System.Net.IPEndPoint([System.Net.IPAddress]::Any, 0)

$receivedBytes = $udpClient.Receive([ref]$remoteEndPoint)

$receivedMessage = [Text.Encoding]::ASCII.GetString($receivedBytes)

# Display received message with timestamp

$receiveTimestamp = Get-Date -Format "yyyy-MM-dd HH:mm:ss"

Write-Host "Server [$receiveTimestamp]: $receivedMessage"

$lineNumber++

}

# Close the UDP client

$udpClient.Close()

Write-Host "Disconnected from server."