**Worksheet 5 - File distribution**

How much time does it take to distribute file (size *F*)

from one server to *N peers*?Compare time for Client

server architecture and P2P architecture.

F = file size, Us = Server’s upload speed,

di = client/peer download speed, ui = client/peer upload speed

Given: F = 50MB Us = 20Mbps, di = 5000Kbps, ui = 0.05Mbps

1. N = 10 clients
2. N = 100 clients
3. N = 1000 clients
4. N = 10,000 clients