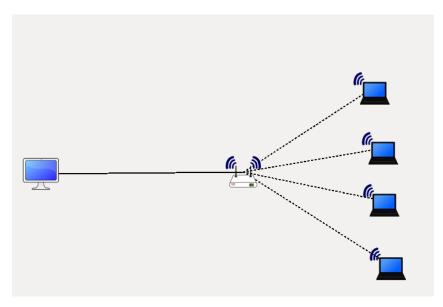
# PROJECT REPORT

### SIMULATIONS:

## 1. Topology



Topology with 12 WiFi Clients

### 2. Simulation parameters

Parameters	Value
DataRate	54Mbps
Payload Size	1460
Standard	802.11g
Protocol	ТСР
Number of clients	12
Download Size	10485760 Bytes
Rate Adaption	Constant
Mobility	Fixed

#### 3. Results of simulation

Total Download Time(12 clients)	60 seconds
Average Download Time per Client	48 seconds
Aggregate Throughput	19 Mbps

```
■ m kd@kd-HP: ~/Downloads/ns-allinone-3.26/ns-3.26
 905/1901] Compiling scratch/wifi-tcp_copy_1.cc
[1890/1901] Linking build/scratch/wifi-tcp copy 1
waf: Leaving directory `/home/kd/Downloads/ns-allinone-3.26/ns-3.26/build'
Build commands will be stored in build/compile_commands.json
'build' finished successfully (3.886s)
Client 12Completed in 35.5s: 10485760
Throughput of client 12 is : 2.36299 Mbps
Client 10Completed in 46.9s: 10485760
Throughput of client 10 is : 1.78862 Mbps
Client 7Completed in 50.2s: 10485760
Throughput of client 7 is : 1.67104 Mbps Client 3Completed in 54.7s: 10485760
Throughput of client 3 is: 1.53357 Mbps
Client 1Completed in 57.6s: 10485760
Throughput of client 1 is : 1.45636 Mbps
Client 11Completed in 58.3s: 10485760
Throughput of client 11 is : 1.43887 Mbps
Client 4Completed in 58.5s: 10485760
Throughput of client 4 is : 1.43395 Mbps
Client 9Completed in 58.5s: 10485760
Throughput of client 9 is : 1.43395 Mbps
Client 6Completed in 59.1s: 10485760
Throughput of client 6 is: 1.41939 Mbps
Client 8Completed in 60s: 10485760
Throughput of client 8 is : 1.3981 Mbps
Client 5Completed in 60.3s: 10485760
Throughput of client 5 is : 1.39115 Mbps Client 2Completed in 60.7s: 10485760
Throughput of client 2 is : 1.38198 Mbps
kd@kd-HP:~/Downloads/ns-allinone-3.26/ns-3.26$
```

#### CHANGES FROM REAL EXPERIMENT

Parameters	Value
DataRate	54Mbps
Payload Size	1472
Standard	802.11g
Protocol	TCP
Number of clients	12

Download Size	10485760 Bytes
Rate Adaption	minstrel
Mobility	Fixed

Avg download time: 150-160 sec