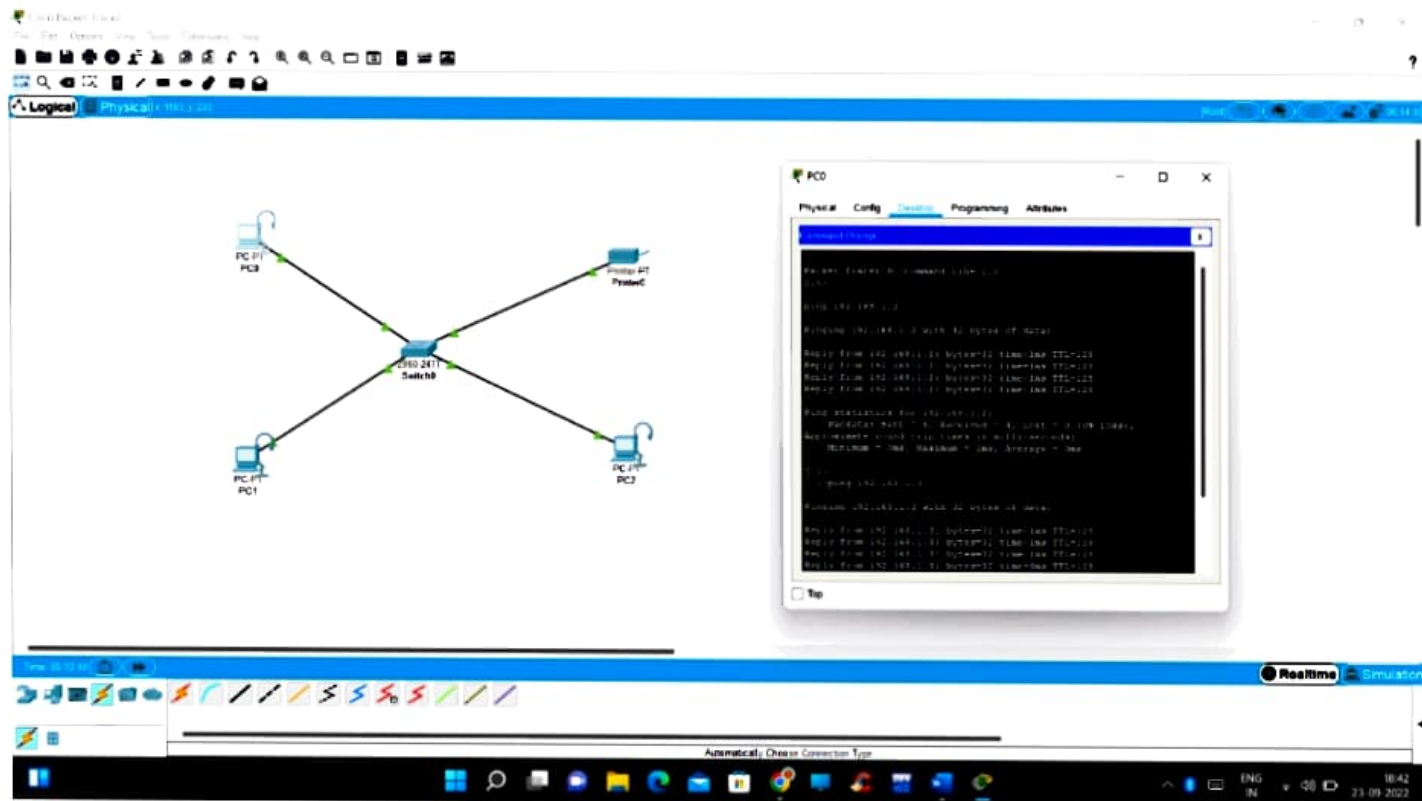
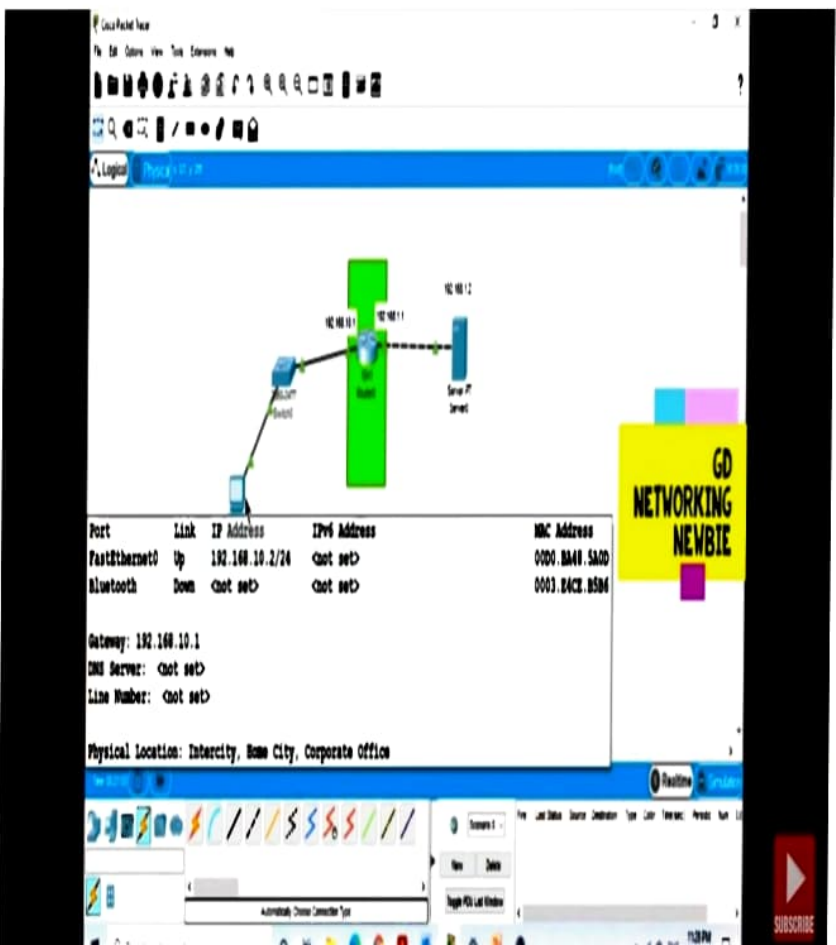
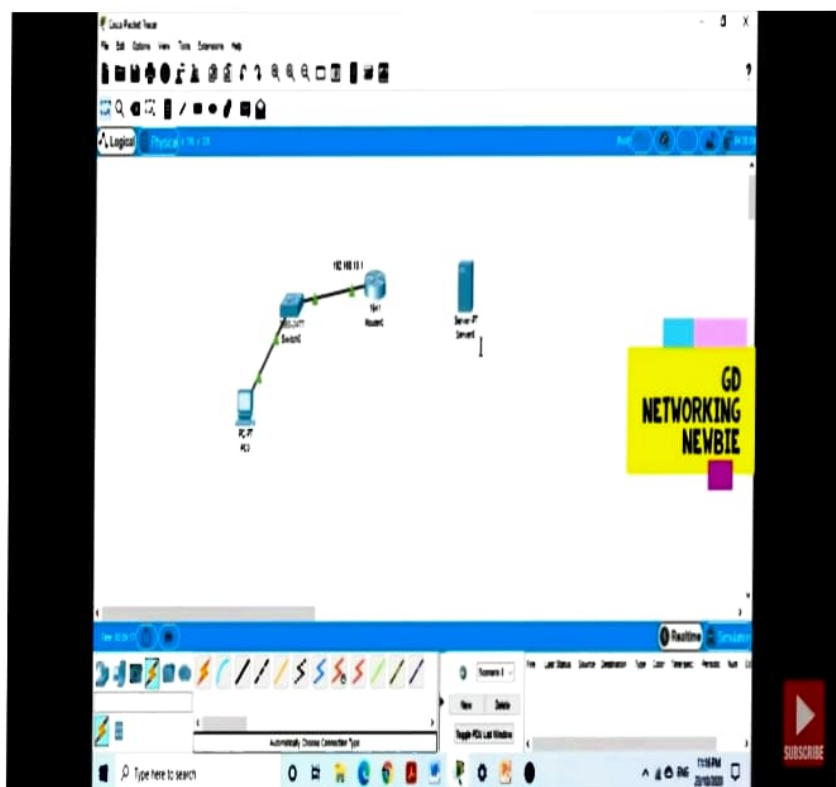


16. Simulate a Multimedia Network



17.AAA local and server



18.IOT Based Smart Home Using Cisco Packet Tracer

Cisco Packet Tracer

File Edit Options View Tools Extensions Help

Logical Physical 1422 x 424

Simulation Panel

Event List

Vis	Time(sec)	Last Device	At Device	Type
	0 008	-	Home Gate	IoT TCP
Visible	0 009	Home Gate	a	IoT TCP
Visible	0 009	Home Gate	IoT3	IoT TCP
Visible	0 009	Home Gate	IoT0	IoT TCP
Visible	0 009	Home Gate	IoT2	IoT TCP

Reset Simulation ☒ Constant Delay Capturing...

Play Controls

Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPv2, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

Scenario 0

New Delete

Toggle PDU List Window

89°F Partly sunny

ENG IN 17:42 13-09-2022

```
graph TD
    SLC100[SLC100 Home Gateway] --- Door[Door IoT2]
    SLC100 --- Fan[Fan IoT0]
    SLC100 --- AC[Air Conditioner a]
    SLC100 --- Garage[Garage Door IoT3]
```

Cisco Packet Tracer

File Edit Options View Tools Extensions Help

Logical Physical x 1422 y 424

Home Gateway

Door IoT2

Fan IoT0

Garage Door IoT3

Air Conditioner

Simulation Panel

Event List

Vis	Time(sec)	Last Device	At Device	Type
0 001	-	Home Gate	a	IoT TCP
0 003	Home Gate	a	IoT TCP	
0 003	Home Gate	IoT3	IoT TCP	
0 003	Home Gate	IoT0	IoT TCP	
0 003	Home Gate	IoT2	IoT TCP	
0 025	-	a	TCP	
0 027	a	Home Gate	TCP	
0 028	-	IoT3	TCP	
0 030	IoT3	Home Gate	TCP	
0 030	-	IoT2	TCP	
0 031	-	Home Gate	TCP	
Visible 0 034	Home Gate	a	TCP	
Visible 0 034	Home Gate	IoT3	TCP	
Visible 0 034	Home Gate	IoT0	TCP	
Visible 0 034	Home Gate	IoT2	TCP	

Reset Simulation ☐ Constant Delay Captured to: 0 034 s

Play Controls

Event List Filters - Visible Play Speed Slider

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, MIB, NTP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, RFP, RFPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

Scenario 0

New Delete

Toggle PDU List Window

Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

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ENG IN 17:43 13-09-2022

Cisco Packet Tracer

File Edit Options View Tools Extensions Help

Logical Physical x 714 y 35

SMARTPHONE-PT Smartphone0

Home Gateway

Door IoT2

Fan IoT0

Garage Door IoT3

Air Conditioner

Smartphone0

Physical Config Desktop Programming Attributes

IoT Monitor

IoT Server - Devices

home | Conditions | Editor | Log Out

a (PTT0810V149-) AC

IoT3 (PTT0810QN4E-) Garage Door

On

IoT0 (PTT0810XY25-) Ceiling Fan

Status Off Low

IoT2 (PTT0810OY9X-) Door

Open

Lock

Top

Scenario 0

New Delete

Toggle PDU List Window

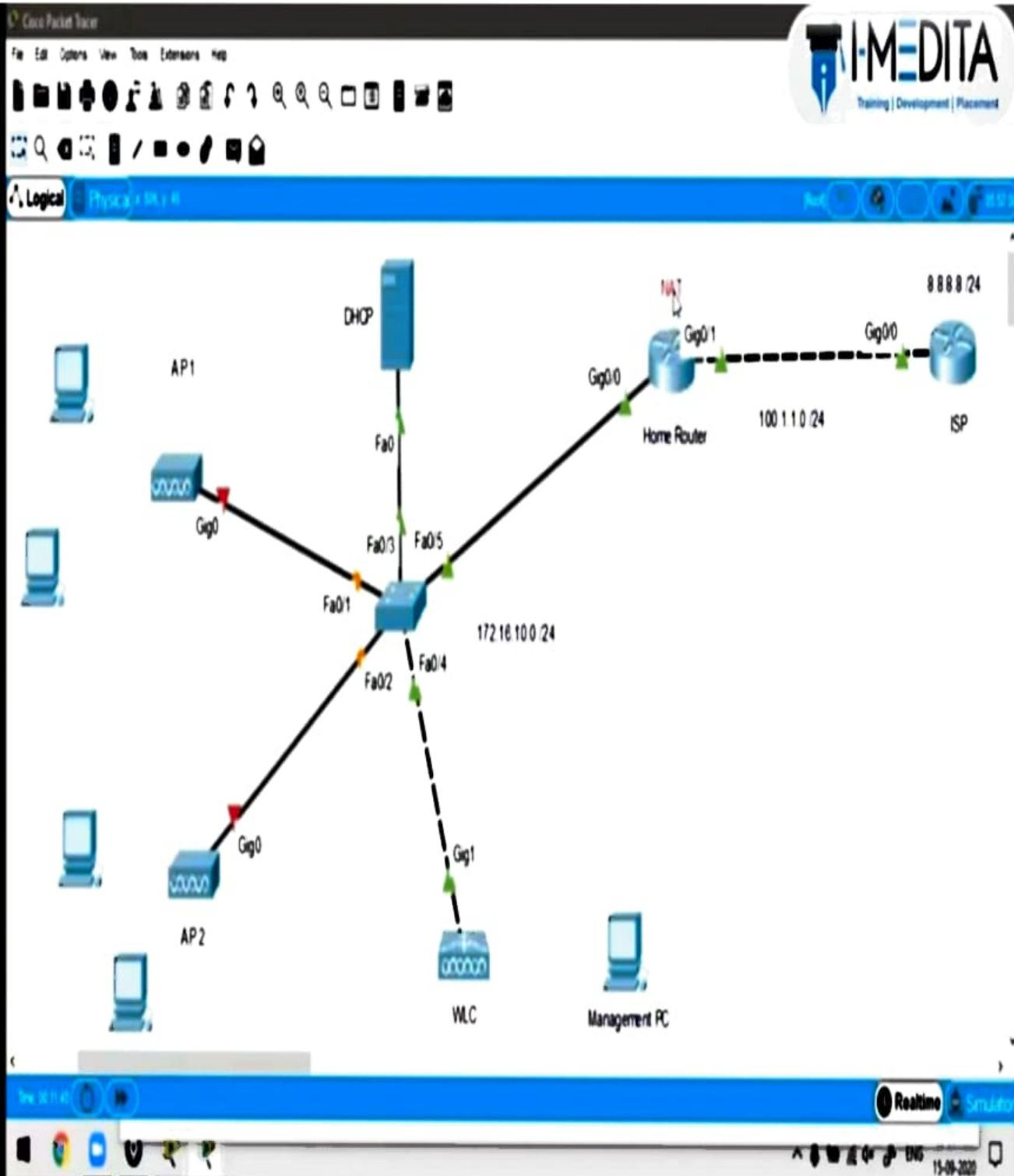
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

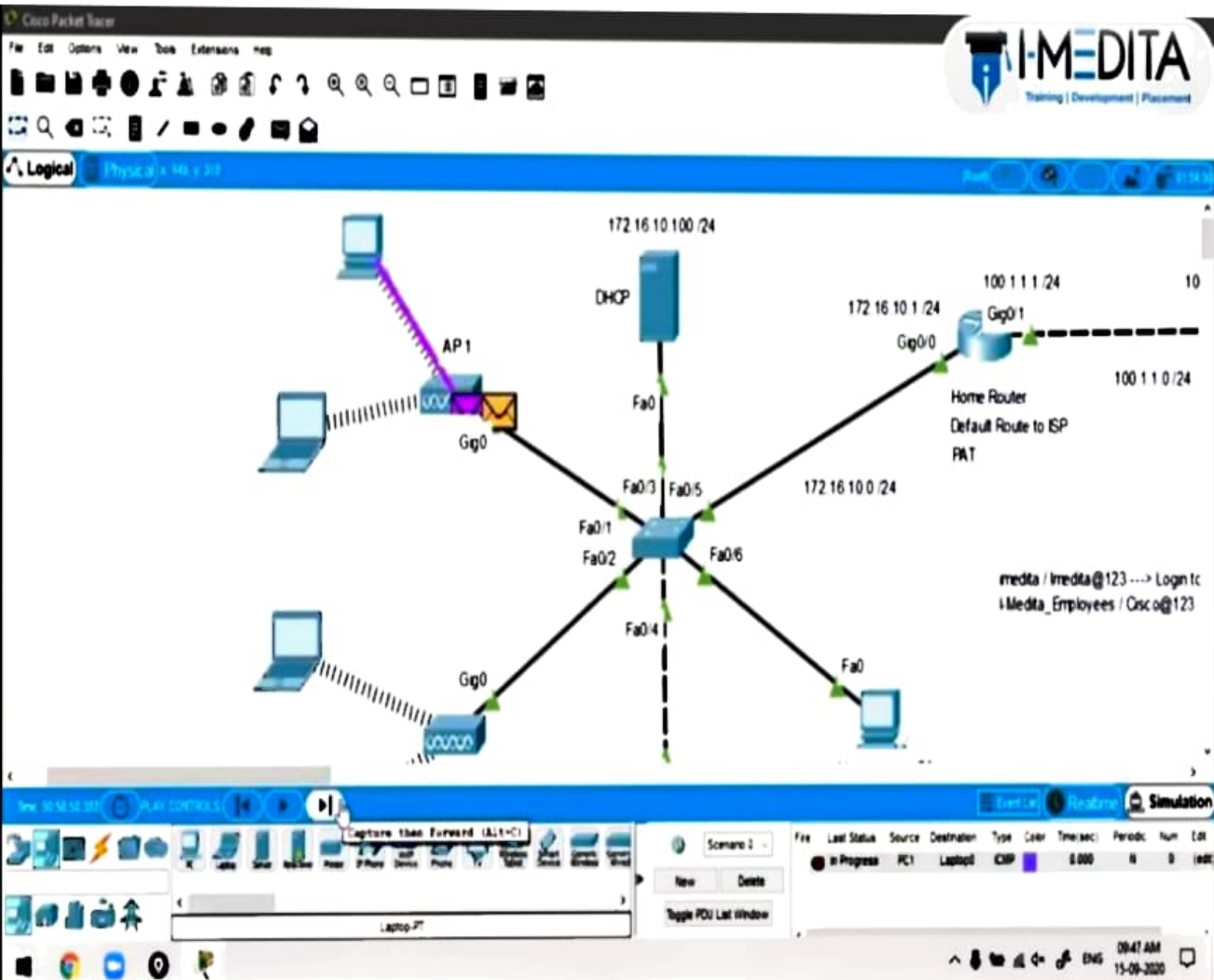
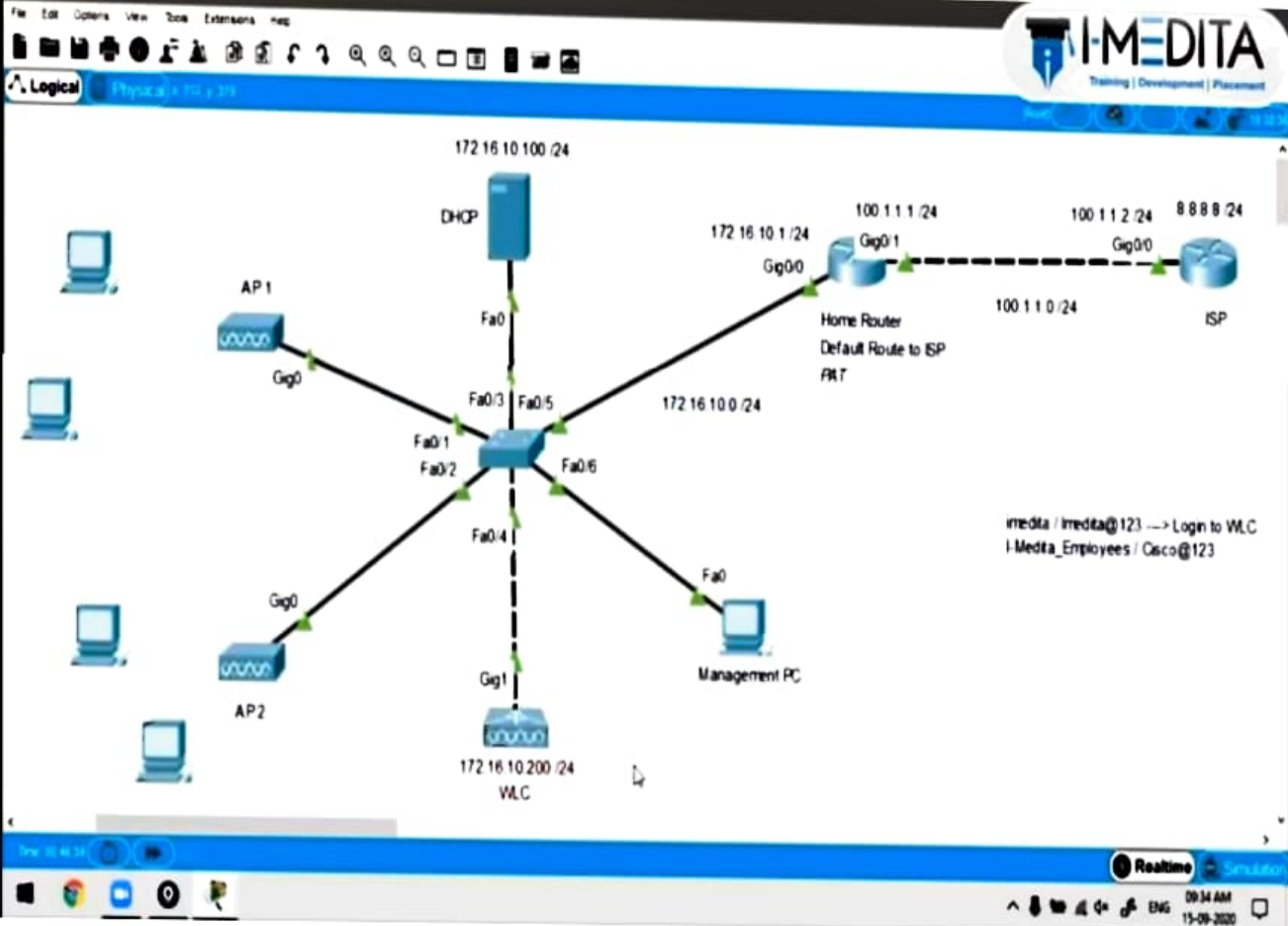
89°F Partly sunny

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19.WLAN using Cisco

Packet Tracer





20. Control of Fan, Light, Window & Application of Using Cisco Packet Tracer

Figure 20 illustrates the control of a Fan, Light, Window, and Home Speaker using Cisco Packet Tracer. The network topology shows a central Home Gateway (IoT100) connected to four IoT devices: Fan IoT0, Light IoT1, Window IoT2, and Home Speaker IoT3. A Smartphone0 (PT Smartphone0) is also connected to the Home Gateway.

The Smartphone0 configuration window is shown, displaying the Physical tab. The configuration includes:

- IoT Server:** PT100 (PT100IoT05T-)
- IoT2:** PT100 (PT100IoT05T-)
- IoT1:** PT100 (PT100IoT05T-)
- IoT3:** PT100 (PT100IoT05T-)

The configuration also shows the status of the devices, including the Fan, Light, Window, and Home Speaker, with buttons for On/Off and Dim/Max.