

PUNJAB UNIVERSITY COLLEGE OF INFORMATION TECHNOLOGY(PUCIT)

Computer Networks Lab 07

BS-IT MORNING Fall-17 (New Campus)

Date: 08-05-2020

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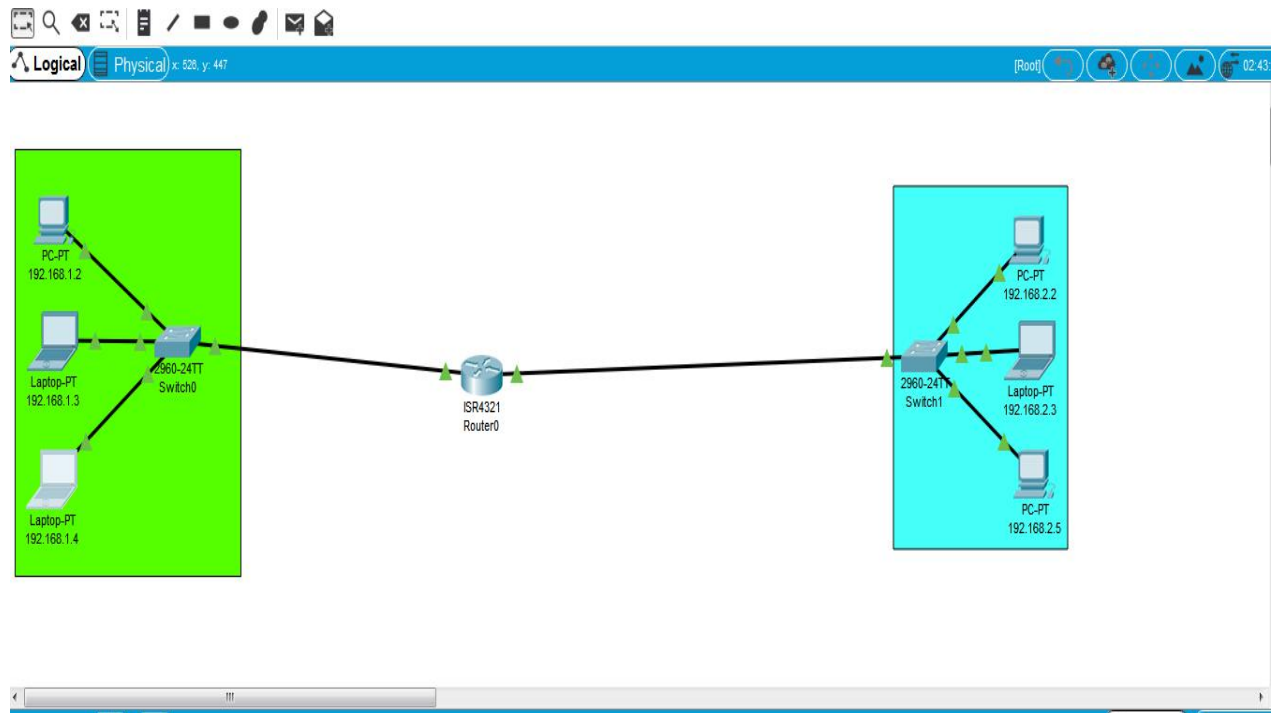
Perform the following practicals, take screenshots of all the steps and paste them in word document with a line or two explaining every step.

1. Packet Tracer:

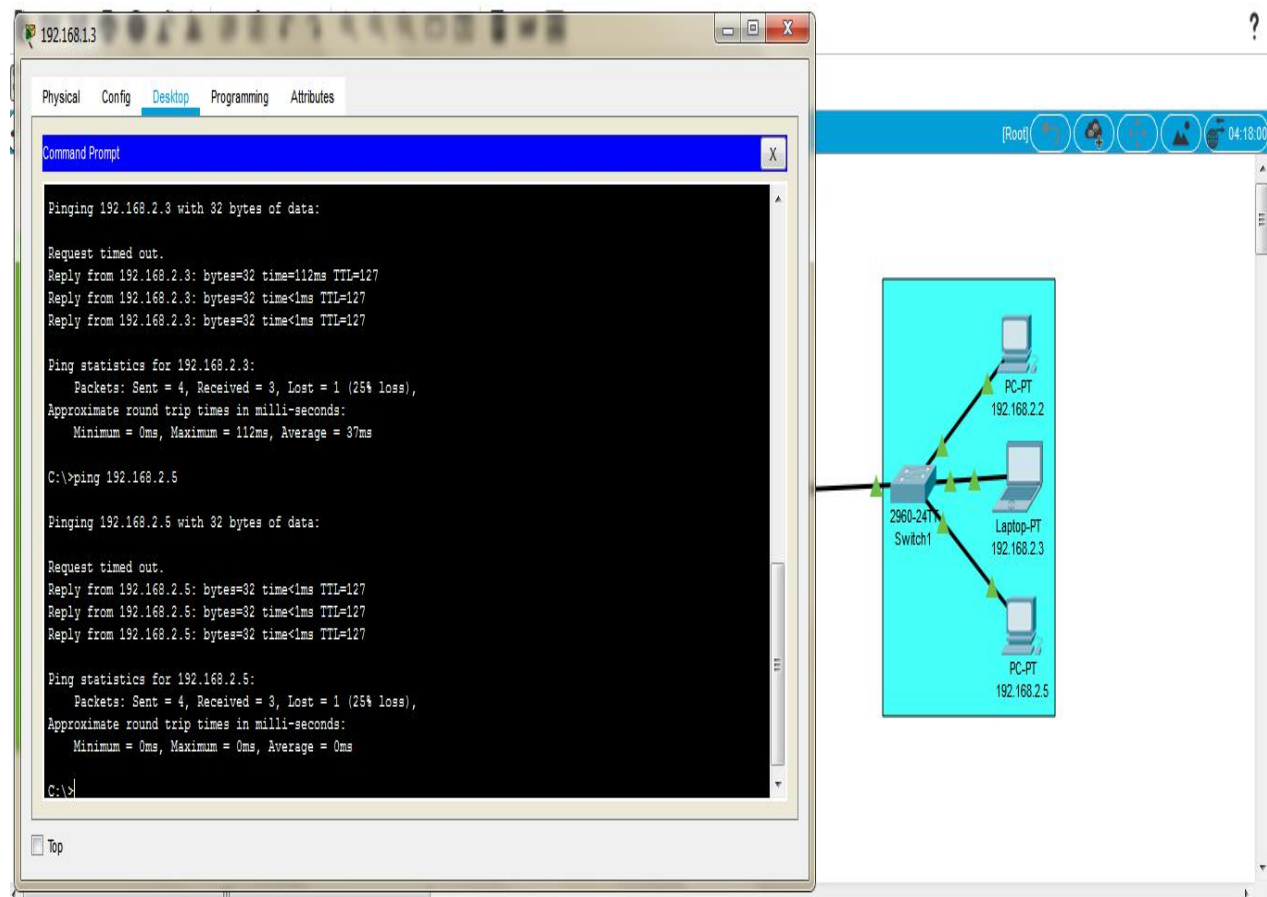
Show how will you communicate(transfer data) between two different networks using a Router?

Network

architecture.:



Screen Shot of data transfer simulation (working of network).



2. IoT:

Show how will you control a fan and a lamp using mobile in IoT system?

Note: Take screenshots of all the steps and paste them in word document with a line or two explaining every step.

Step : 1

Select Fan and Lamp from end Devices of Home.

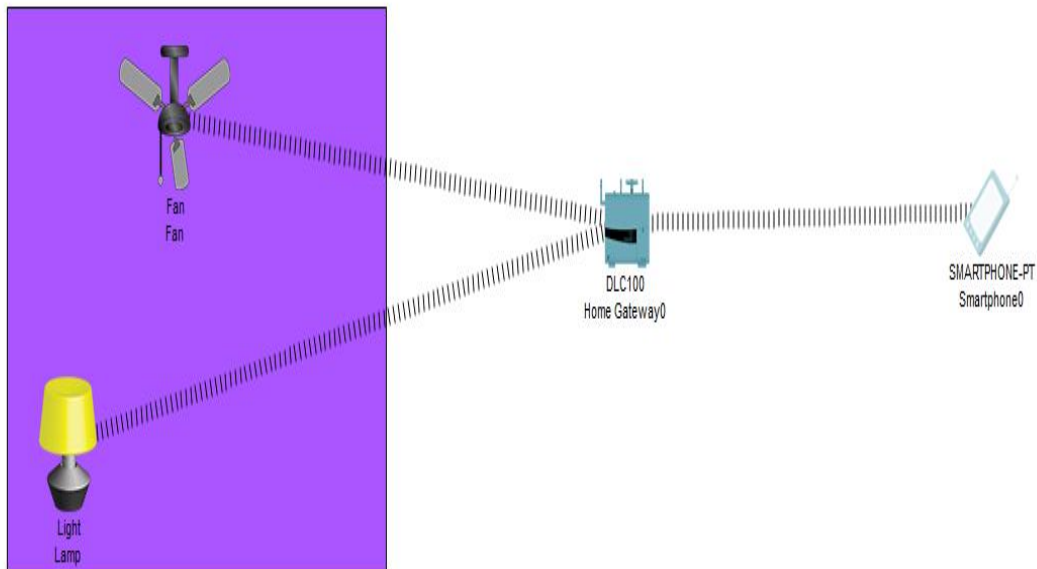


Step : 2

Drag these devices and so first we make a Architecture of our working :

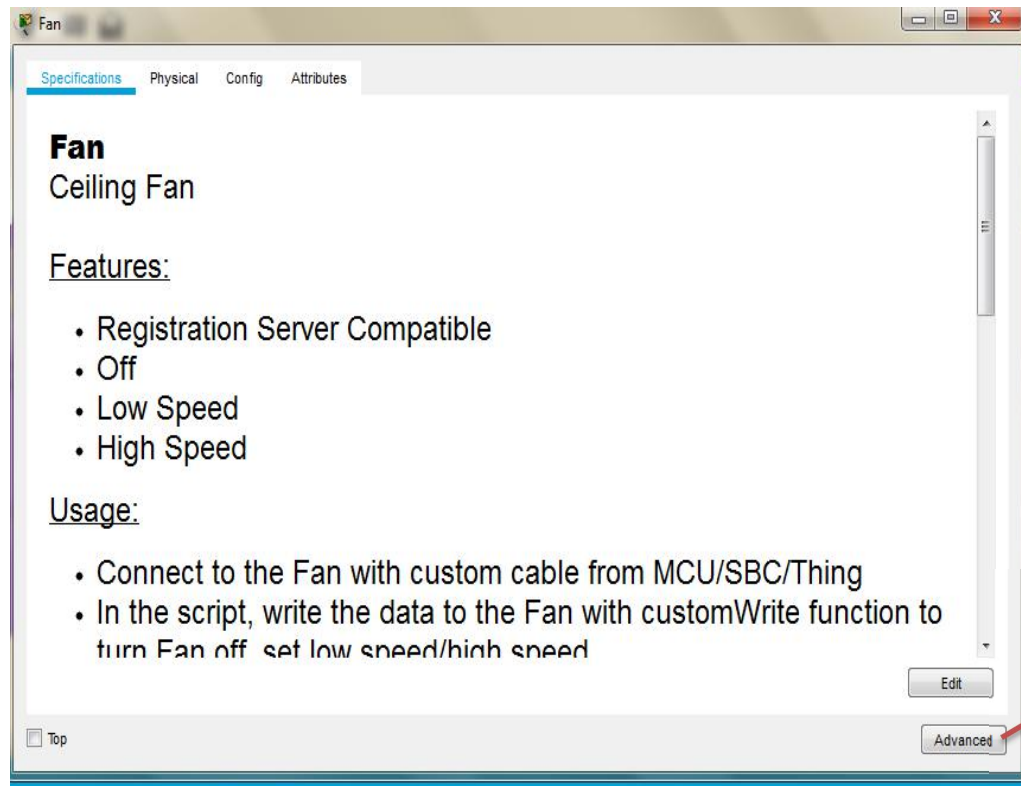
- **SELECT NETWORK DEVICES :**
 - ◆ **SELECT WIRELESS**
 - ◆ **NOW THE TIME IS FOR HOME GATEWAY.**
- **SELECT END DEVICES :**
 - ◆ **SELECT SMART PHONE**

NOW THE ALL THINGS YOU FRAG INTO THE SCREEN AND THE FINAL SCREEN IS HERE .



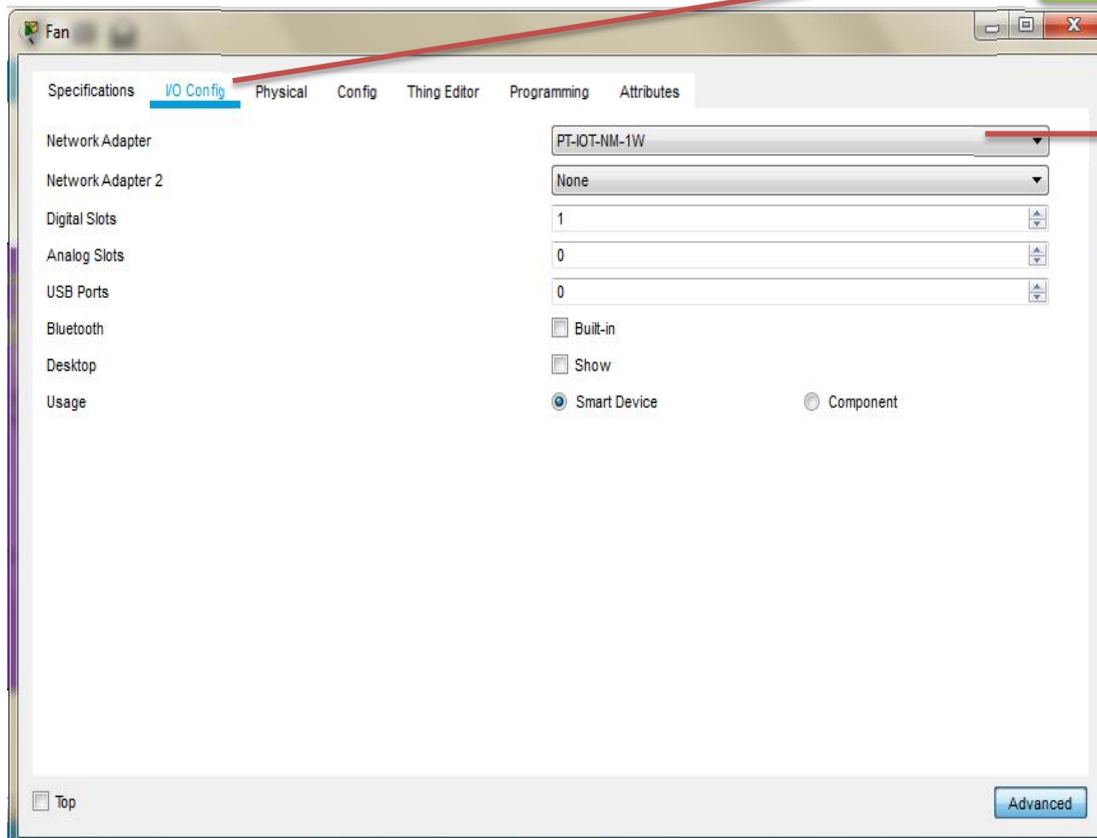
NOW THE TIME IS FOR CONFIGURATION :

CLICK ON FAN :



CLCIK
ADVANCED

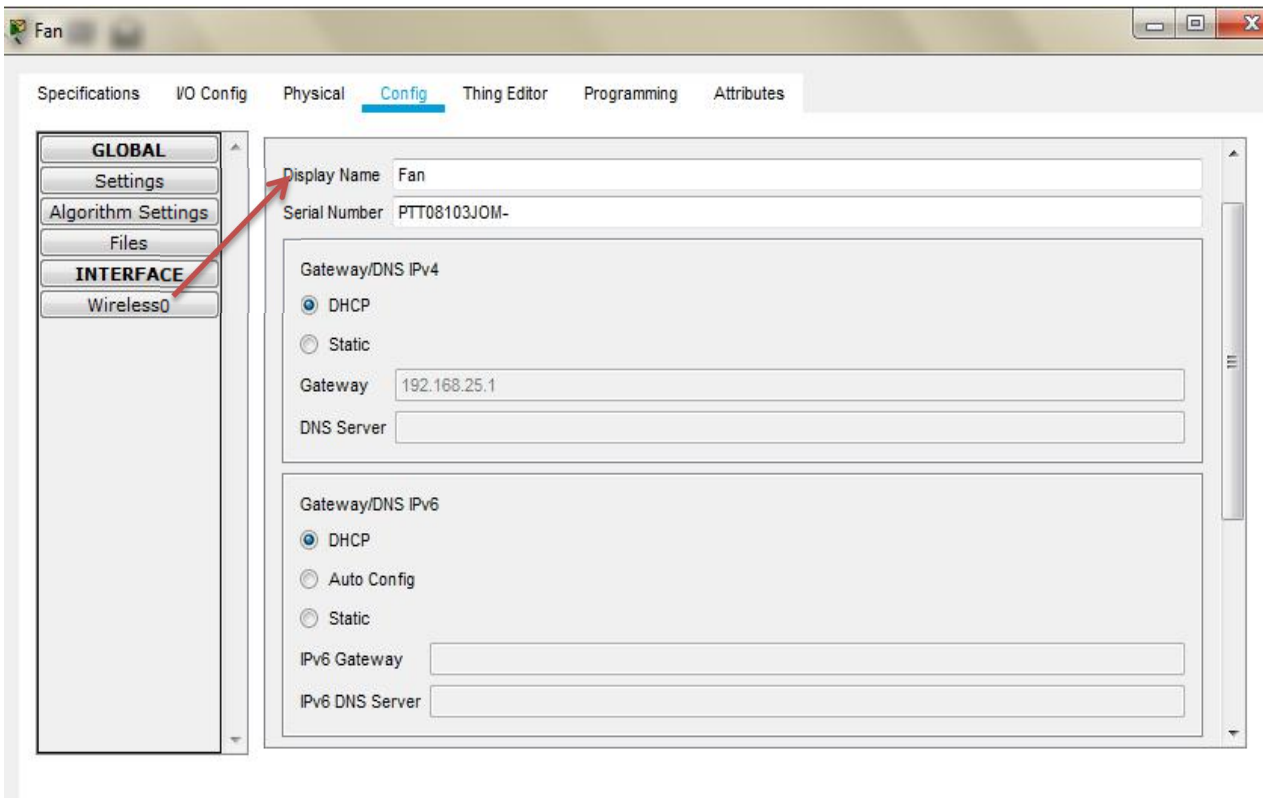
THE FOLLOWING SCREE SHOWN IN FRONT OF YOU:

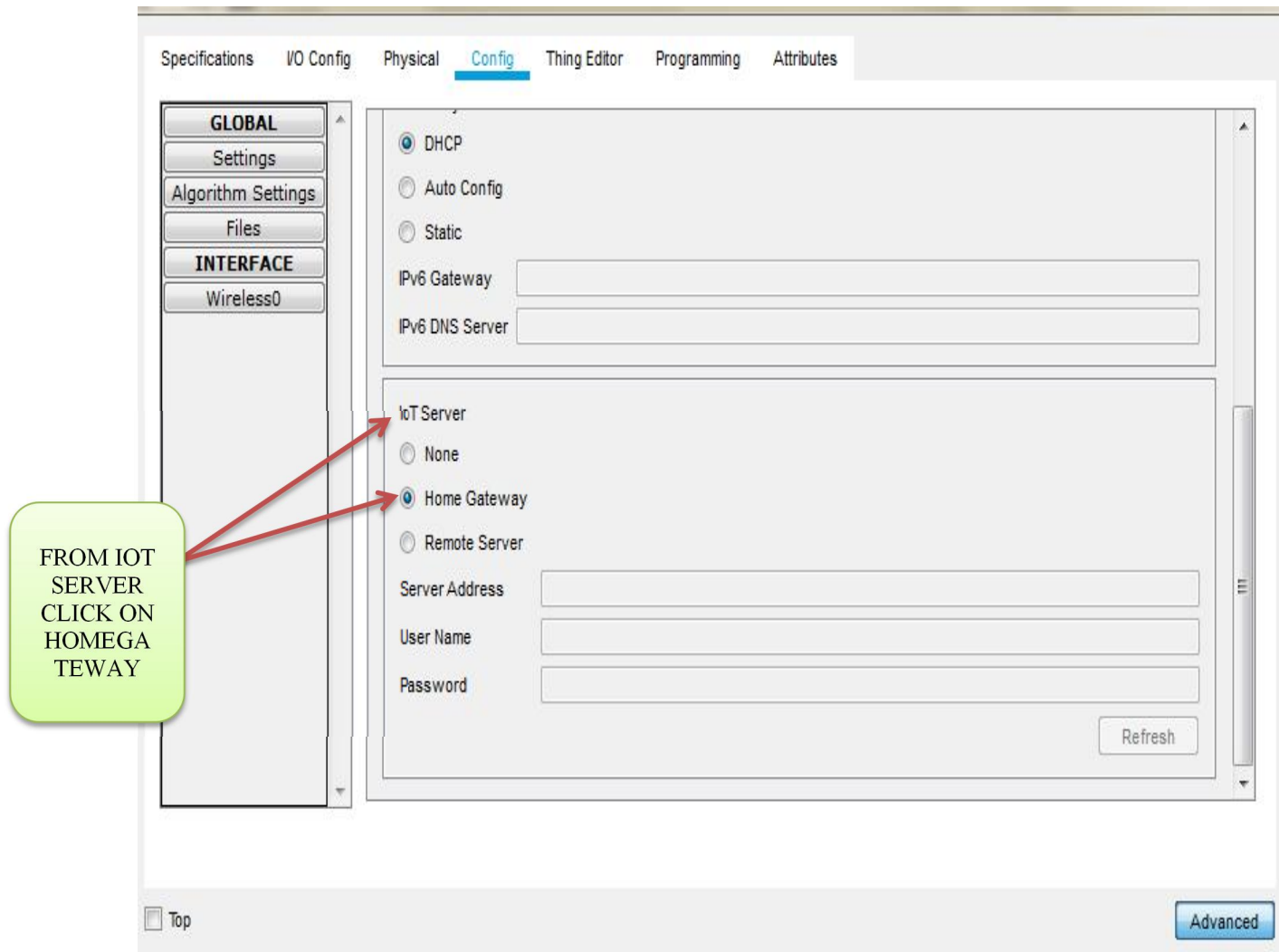


SELECT I/O CONFIG

CHHOSE
NETWORK
ADAPTER :
PT-IOT-NM-
1W

NOW GO TO CONFIG BAR AND WIRELESS 0 NAME THE DEVICE BY TYPING IN THE FIELD OF DISPLAY NAME:





DONE WITH FAN.

NOW THIS IS SAME DONE FOR LAMP AND WE ARE DONE WITH CONFIGURATION OF FAN AND LAMP MEAN END DEVICES

CLICK ON HOME GATEWAY:

Home Gateway0

Physical **Config** GUI Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

Internet

LAN

Wireless

Wireless Settings

SSID: HomeGateway

2.4 GHz Channel: 6 - 2.437GHz

Coverage Range (meters): 250.00

Authentication:

☒ Disabled ☐ WEP WEP Key:

☐ WPA-PSK ☐ WPA2-PSK PSK Pass Phrase:

☐ WPA ☐ WPA2

RADIUS Server Settings:

IP Address:

Shared Secret:

Encryption Type: Disabled

Top

COPY THIS
SSID

DONE WITH HOME GATEWAY.

CLICK ON SMART PHONE :

NOW IN SMART PHONE GO TO CONFIG AND PASTE THE COPY SSID OF HOME GATEWAY TO SMARTPHONE SSID :

Smartphone0

Physical **Config** Desktop Programming Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

Wireless0

3G/4G Cell1

Bluetooth

Wireless0

Port Status ☒ On

Bandwidth 300 Mbps

MAC Address 0090.2BBA.B798

SSID HomeGateway

Authentication

☒ Disabled ☐ WEP ☐ WPA-PSK ☐ WPA2-PSK

☐ WPA ☐ WPA2

☐ 802.1X Method:

WEK Key

PSK Pass Phrase

User ID

Password

MD5

User Name

Password

Encryption Type Disabled

IP Configuration

☒ DHCP ☐ Static

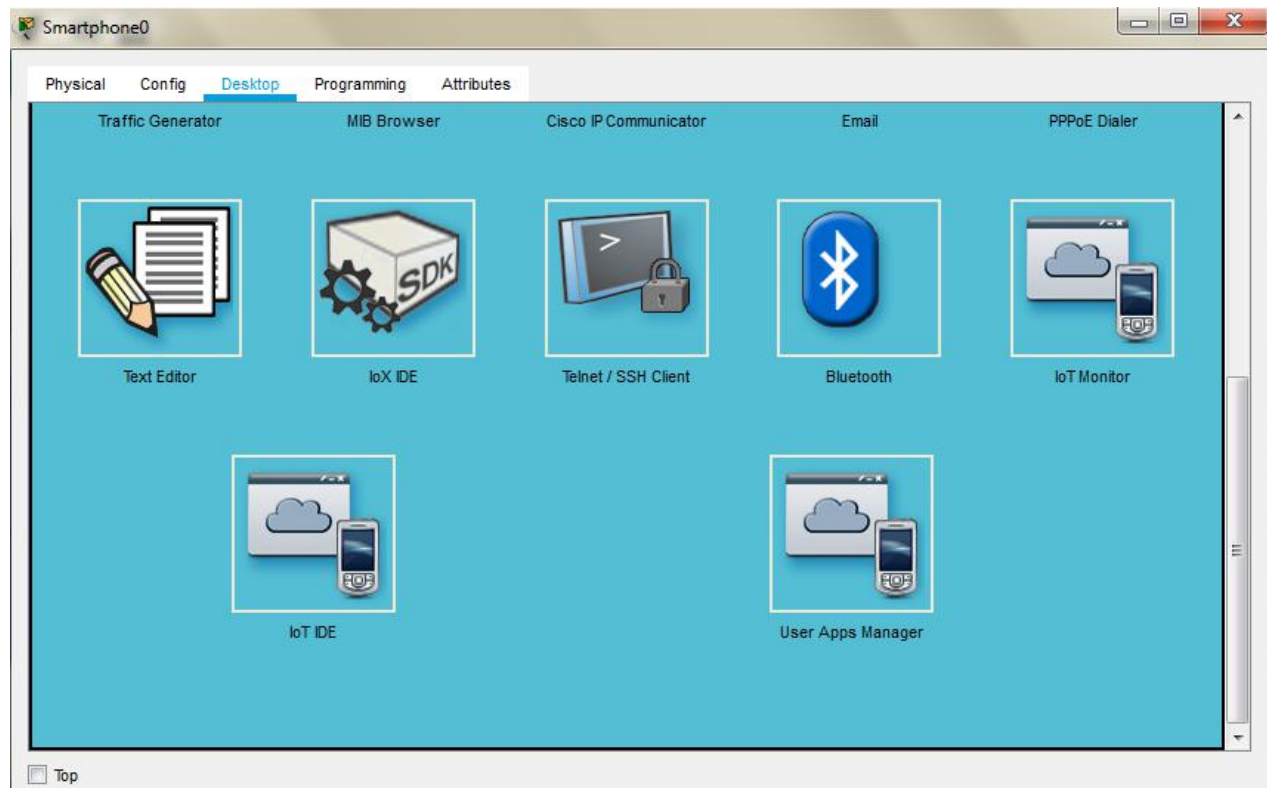
IP Address 192.168.25.102

Subnet Mask 255.255.255.0

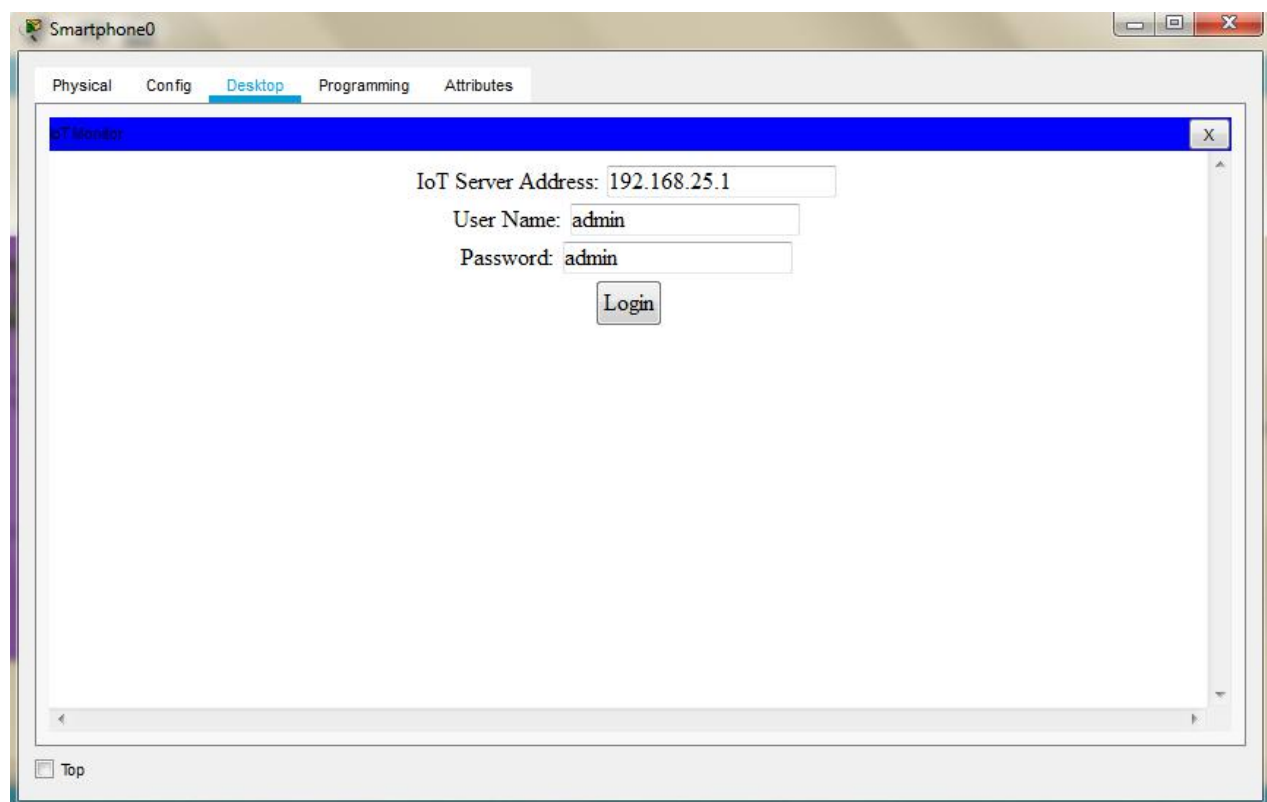
Top

HERE
IS
PASTE

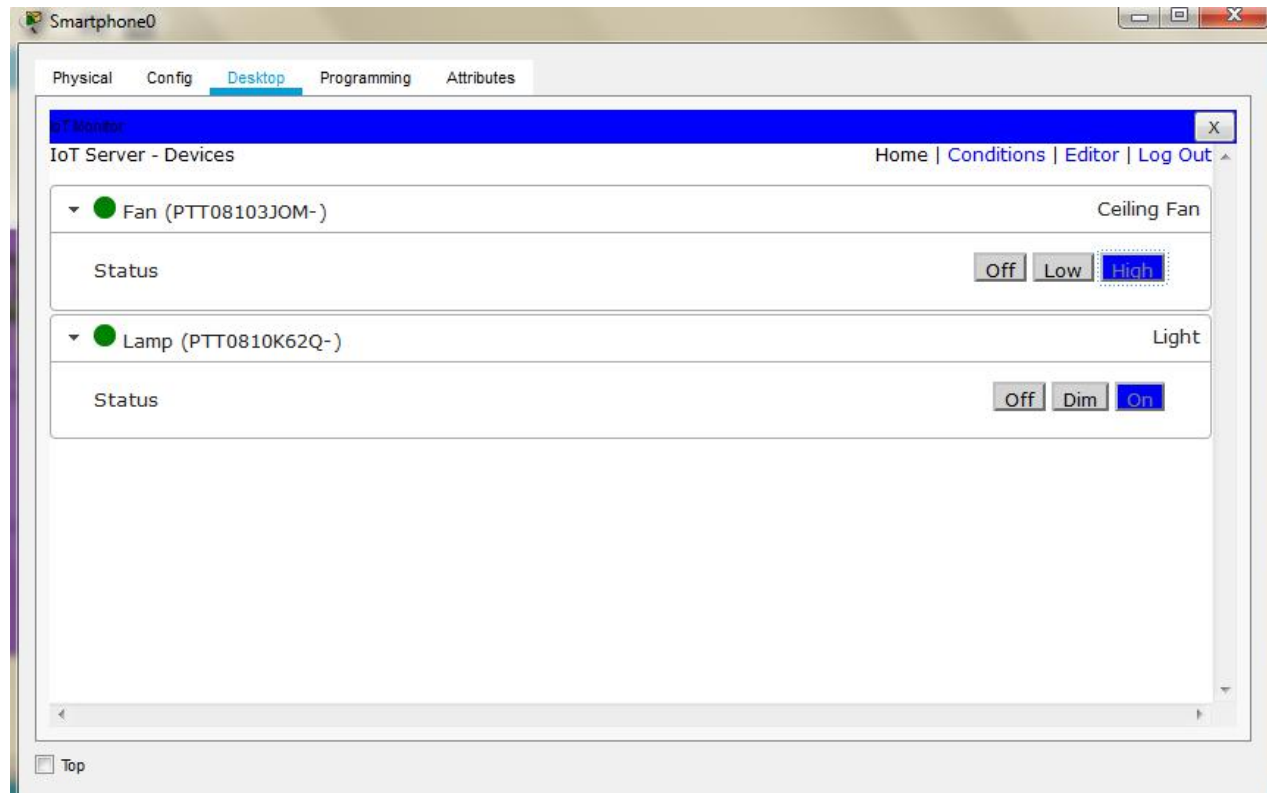
NOW GO TO DESKTOP BAR SELECT IOT MONITOR :



CLICK ON LOGIN



NOW HERE IS YOUR CONTROLLING WINDOW TO TURN ON OR OFF YOUR DEVICES .



AND CONNECTION IS BUILT: HAPPY LEARNING (^-^)

