# CSE 5004

## COMPUTER NETWORKS

## Assessment – 1

L1+L2 | SJT418

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by

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# Question 1

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1. A) Write a C program to print the IP address of "www.google.com".
   B) Write a C program to print the IP address of "localhost".

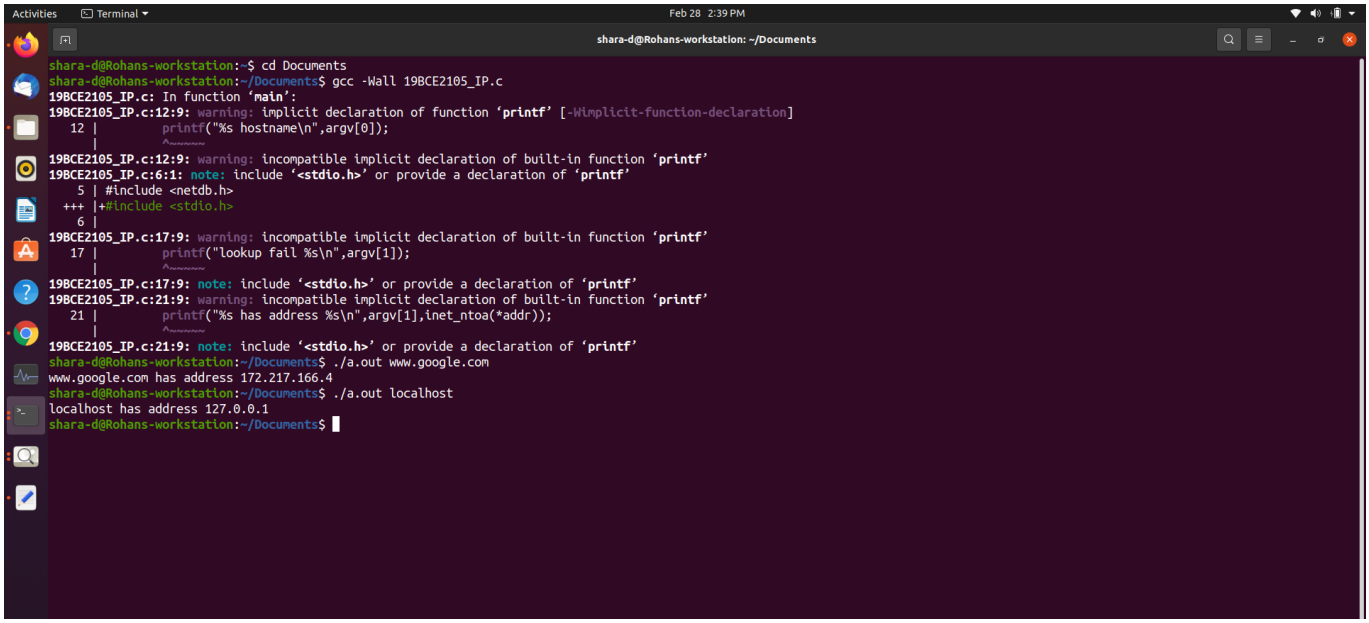
**Solution:**

```c
#include <string.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <arpa/inet.h>
#include <netdb.h>

int main(int argc,char **argv){
    struct hostent *info;
    struct in_addr *addr;

    if(argc<2){
        printf("%s hostname\n",argv[0]);
    }
    info=gethostbyname(argv[1]);

    if(info == NULL){
        printf("lookup fail %s\n",argv[1]);
    }
    else{
        addr=(struct in_addr*)(info->h_addr);
        printf("%s has address %s\n",argv[1],inet_ntoa(*addr));
    }
}
```



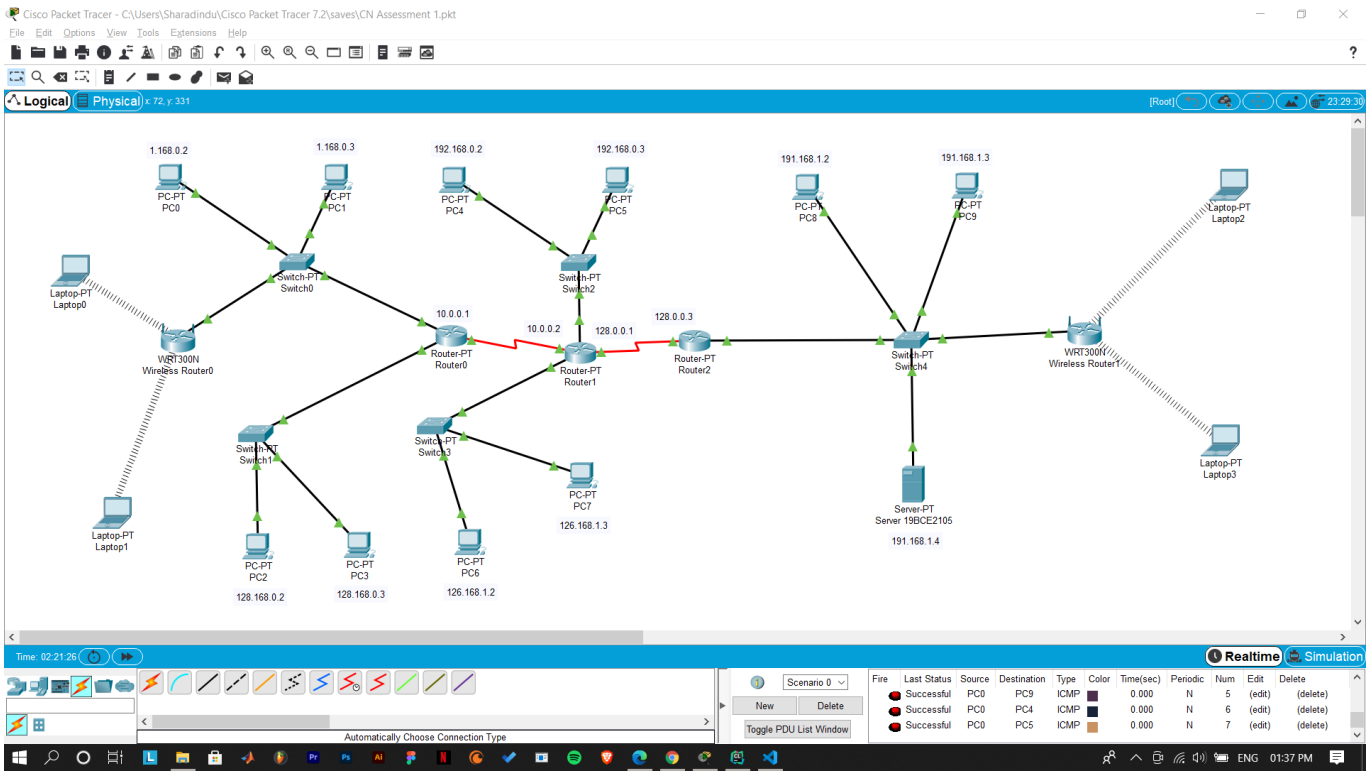
## Question 2

### Cisco Packet Tracer

2. Design the following network configuration using packet tracer:-
   a) 1 Server (type “Reg.No –PT”)
   b) 10 PC’s
   c) 4 Laptops
   d) 3 Routers
   e) 5 Switches

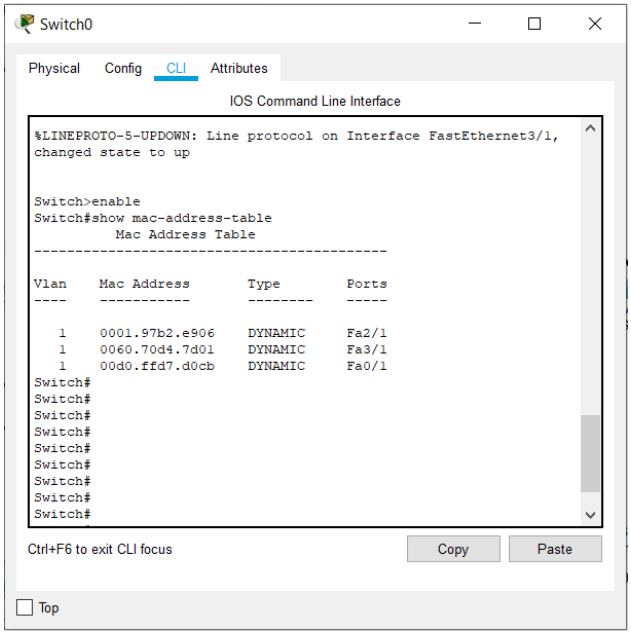
i) Type all the names using label option ( Type your reg.number as a server name)
ii) Assign IP address to all PC’s – Using Class B IP address
iii) Implement DHCP to all Laptops – Using Class C IP address
iv) Assign IP address to Server – Using Class A IP address
v) Make the proper cable configuration between all the devices
vi) Enclose the following screenshot ( Switch MAC address table ; Simulate Ping command; Simulate IP config command ; Simulate simple PDU )

**Solution:**

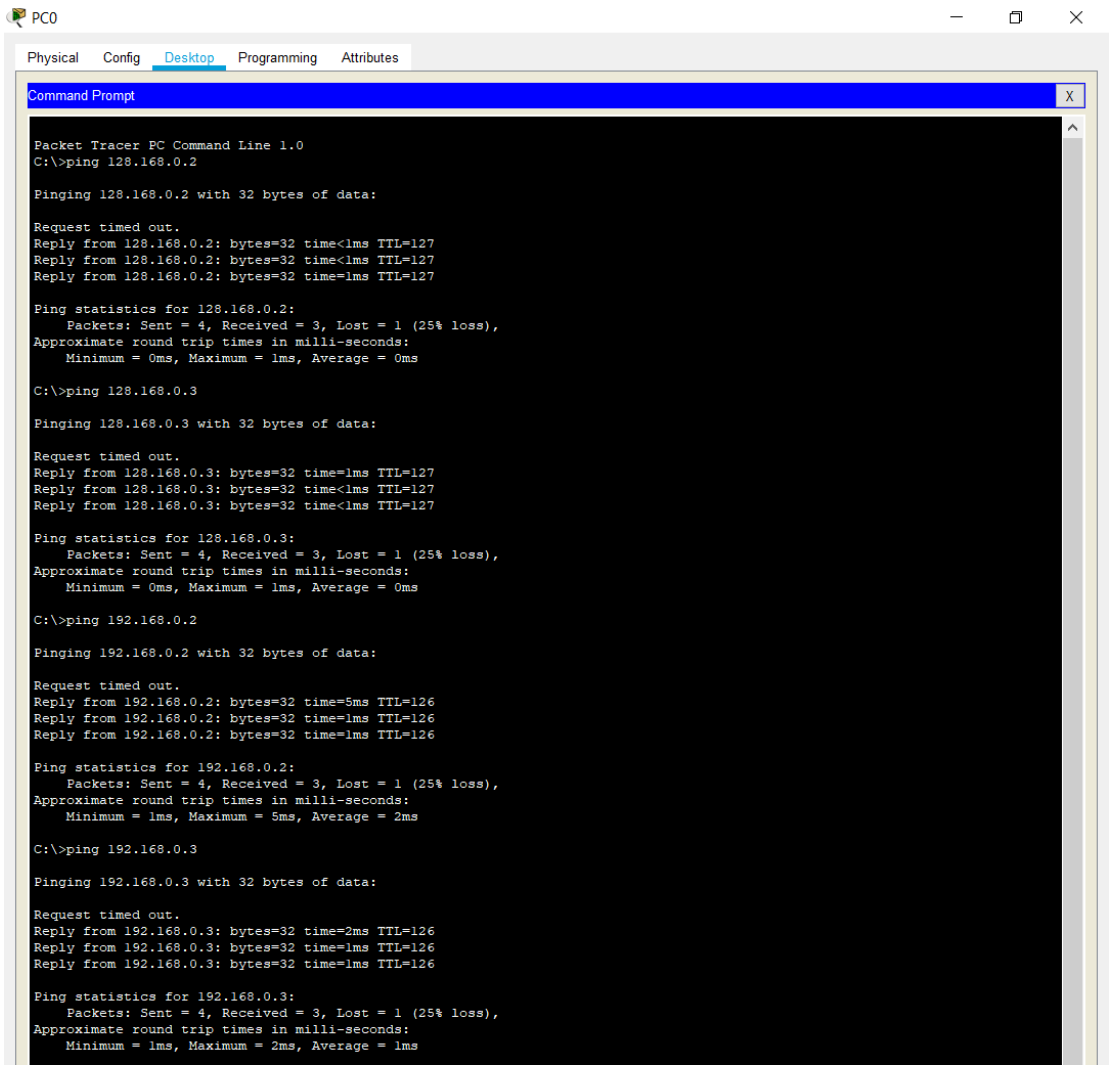


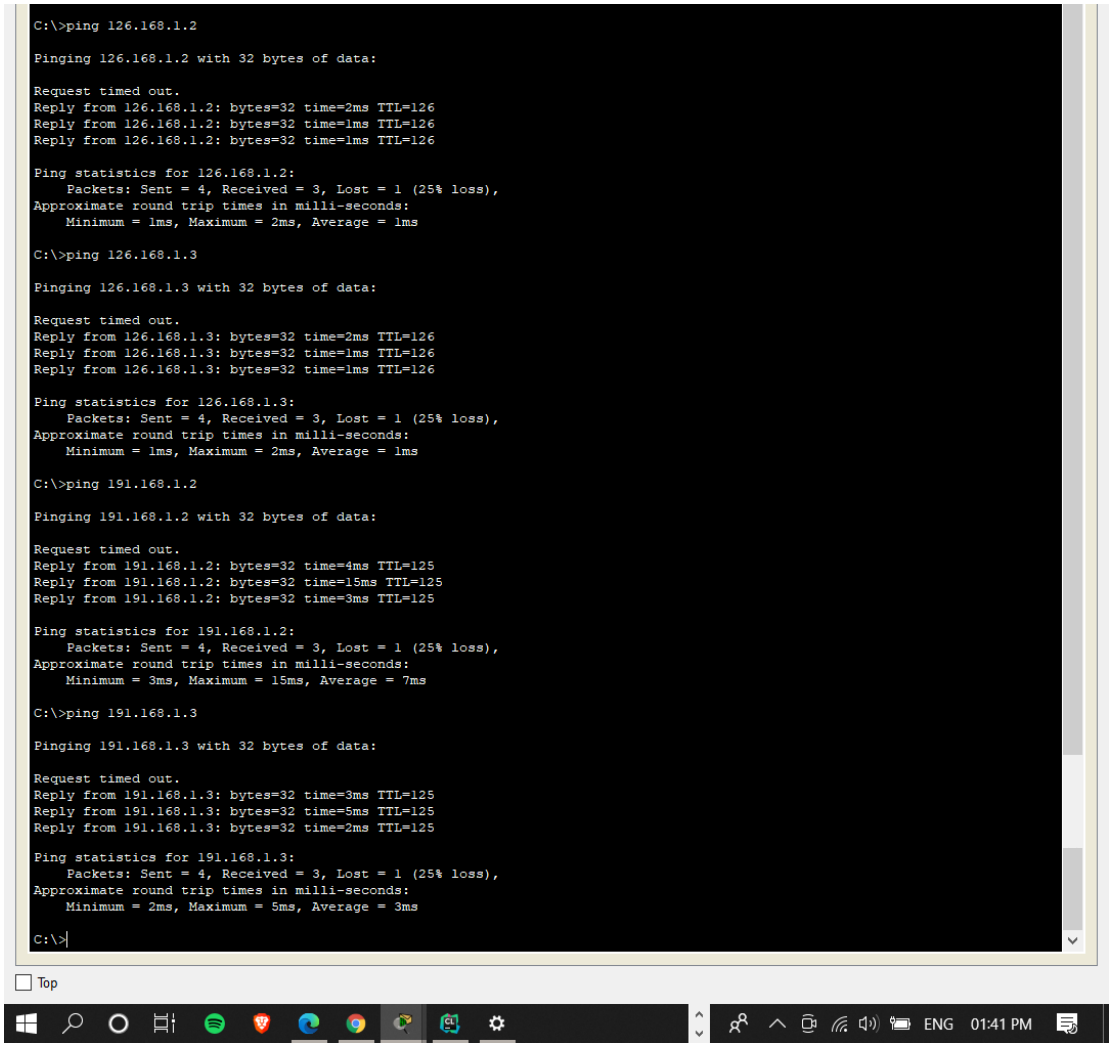

Since for all routers, switches, PCs, and servers, the input IPs and processes are similar, snaps of one from each category are enclosed:

### (a) MAC address table (for Switch 0)

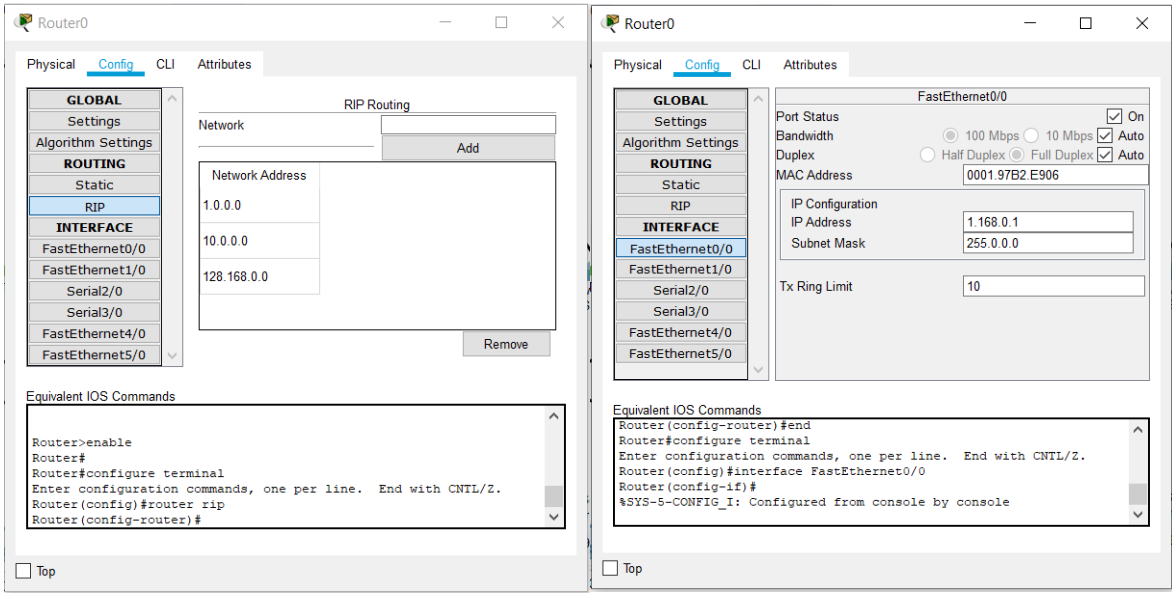


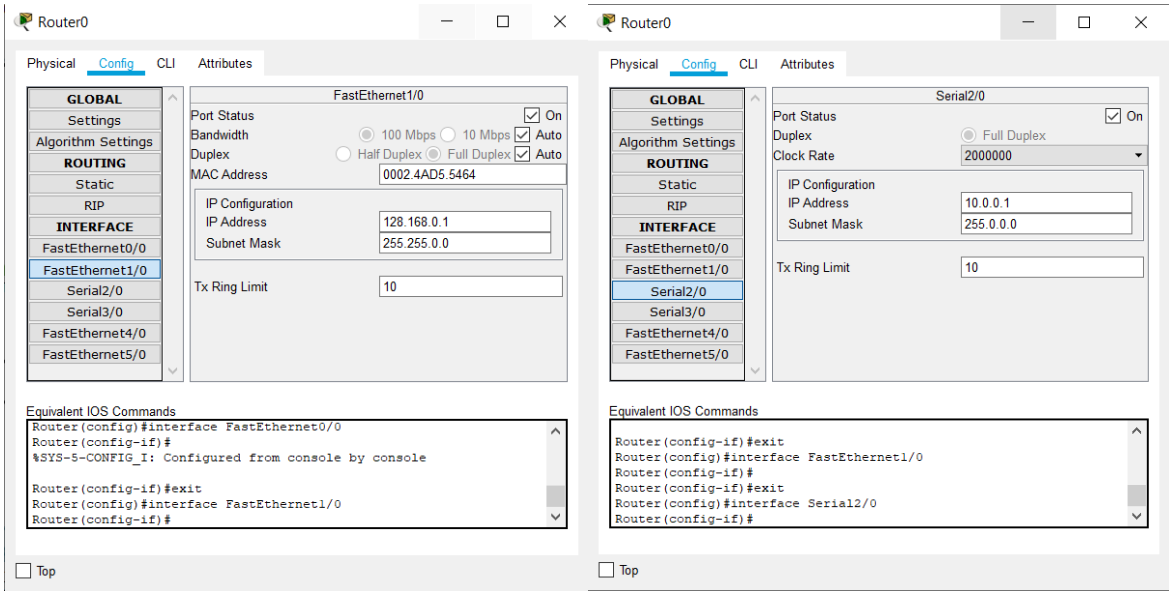

### (b) Ping command (for PC 0)

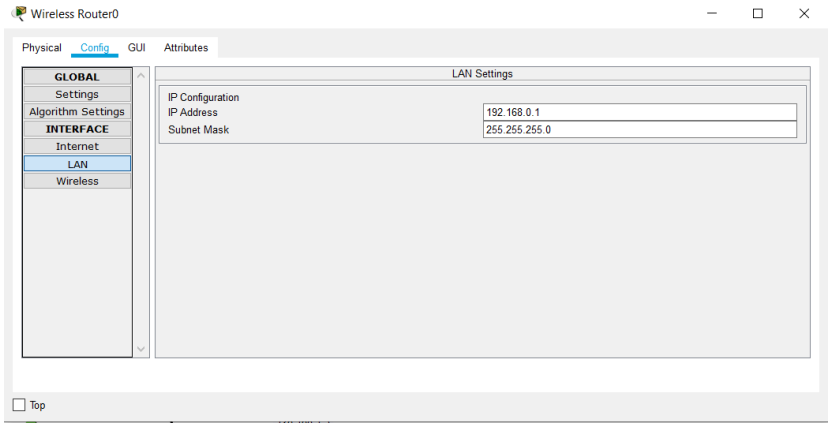


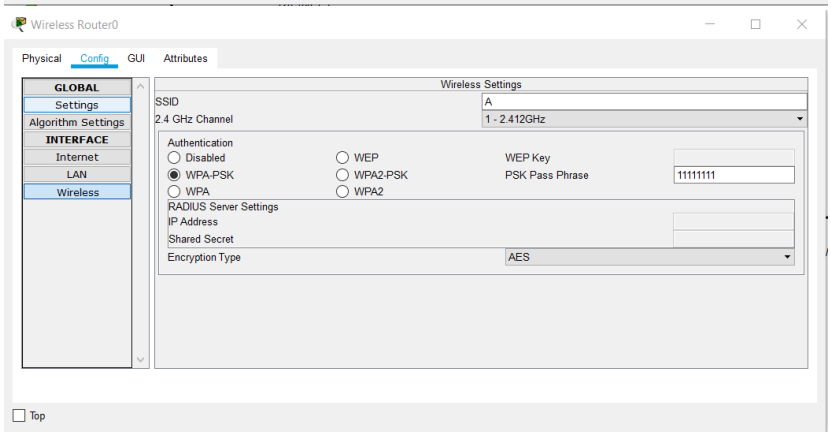



(c) **IP config command** (for Router 0 and Wireless Router 0)






## (d) **Simple PDUs** (from PC 0 through other PCs)