

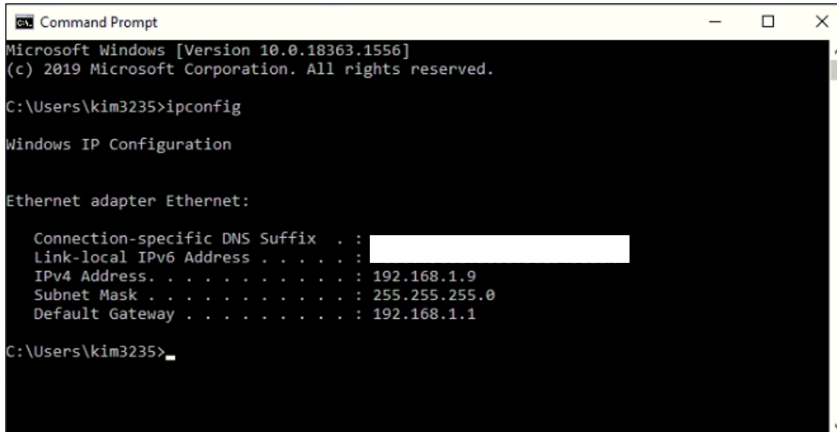
Prelab 0.1 Introduction

0.1 Notation and rule

In the lab manuals, variables, menu, filename, command, code, and so on are written in a tilted font within single quotation marks (like *'example'*) to distinguish other text in the manual. Command for figuring out the IP address of Windows computer, for example, instruction will be 1) Open *'Command Prompt'*, 2) Type *'ipconfig'*. Or it is instructed as followed so that you can copy and paste the command when it is too long and complicated. Tips or comments will be given after a bullet point or pound mark (#). If you are taking online class, you should follow green-colored-text ([Online class](#)).

Windows - Command Prompt

```
ipconfig
```



```
Command Prompt
Microsoft Windows [Version 10.0.18363.1556]
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C:\Users\kim3235>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : 
    IPv4 Address. . . . . : 192.168.1.9
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

C:\Users\kim3235>
```

Figure 1 Check IP address using Windows Command Prompt

In case of Raspberry Pi, your IP address can be checked by 1) Open *'Terminal'*, 2) Type *'ifconfig'*.

Raspberry Pi - Linux - Terminal

```
ifconfig
```

```
pi@raspberrypi: ~  
File Edit Tabs Help  
RX packets 0 bytes 0 (0.0 B)  
RX errors 0 dropped 0 overruns 0 frame 0  
TX packets 0 bytes 0 (0.0 B)  
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536  
inet 127.0.0.1 netmask 255.0.0.0  
inet6 ::1 prefixlen 128 scopeid 0x10<host>  
loop txqueuelen 1000 (Local Loopback)  
RX packets 63652110 bytes 214798389192 (200.0 GiB)  
RX errors 0 dropped 0 overruns 0 frame 0  
TX packets 63652110 bytes 214798389192 (200.0 GiB)  
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
wlan0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
inet 192.168.1.35 netmask 255.255.255.0 broadcast 192.168.1.255  
inet6 fe80::7ba8:410d:f2f:fca7 prefixlen 64 scopeid 0x20<link>  
ether e4:5f:01:43:70:2d txqueuelen 1000 (Ethernet)  
RX packets 753892 bytes 37319844 (35.5 MiB)  
RX errors 0 dropped 0 overruns 0 frame 0  
TX packets 2387713 bytes 3058941136 (2.8 GiB)  
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
pi@raspberrypi:~$
```

Figure 2 Check IP address of Raspberry Pi Terminal

In the prelab and lab manuals, there will be 'Task' directions. You should include **task** outcomes or answers to the question according to the directions in your prelab and lab report.

- Below are examples of various **tasks**, you do not need to complete these.

Examples:

Task 0.1

In []: `#@title 1) Capture your Terminal window and attach it to the report below: {display-mode: "form"}`

```
Command Prompt  
Windows IP Configuration  
  
Ethernet adapter Ethernet:  
  
Connection-specific DNS Suffix . :  
Link-local IPv6 Address . . . . . : fe80::3b40:e6d:4109:5446%12  
IPv4 Address. . . . . : 192.168.50.118  
Subnet Mask . . . . . : 255.255.255.0  
Default Gateway . . . . . : 192.168.50.1  
  
Wireless LAN adapter Wi-Fi:  
  
Media State . . . . . : Media disconnected  
Connection-specific DNS Suffix . :  
  
Wireless LAN adapter Local Area Connection* 1:  
  
Media State . . . . . : Media disconnected  
Connection-specific DNS Suffix . :  
  
Wireless LAN adapter Local Area Connection* 10:  
  
Media State . . . . . : Media disconnected  
Connection-specific DNS Suffix . :  
  
Ethernet adapter Bluetooth Network Connection:  
  
Media State . . . . . : Media disconnected  
Connection-specific DNS Suffix . :
```

In [1]: `#@title 2) What is your IP address? {display-mode: "form"}
T1 = '192.168.50.118' #@param {type:"string"}
print(T1)`

192.168.50.118

Please continue to [Prelab 0.2 here](#).