

[!\[\]\(919a2cb85b99741a73c0c31a427236a8_img.jpg\) Open in Colab](#)

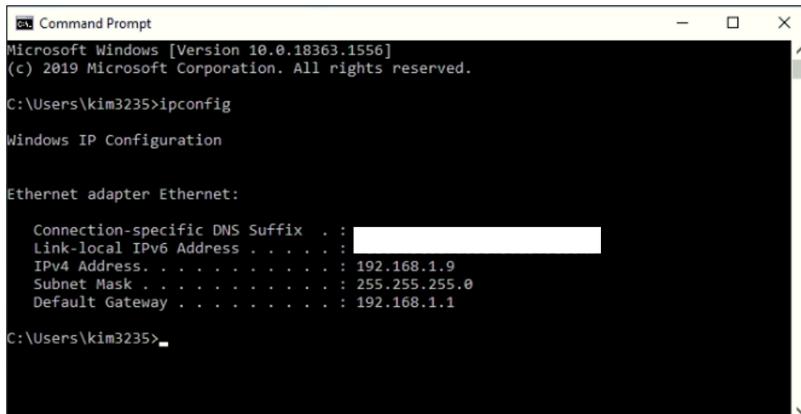
Prelab 0.1 Introduction

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
```



A screenshot of a Windows Command Prompt window. The title bar says 'Command Prompt'. The window shows the following text:

```
Microsoft Windows [Version 10.0.18363.1556]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\kim3235>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

  Connection-specific DNS Suffix . . . . . : [REDACTED]
  Link-local IPv6 Address . . . . . : [REDACTED]
  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}*

```

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.](#)