Assignment

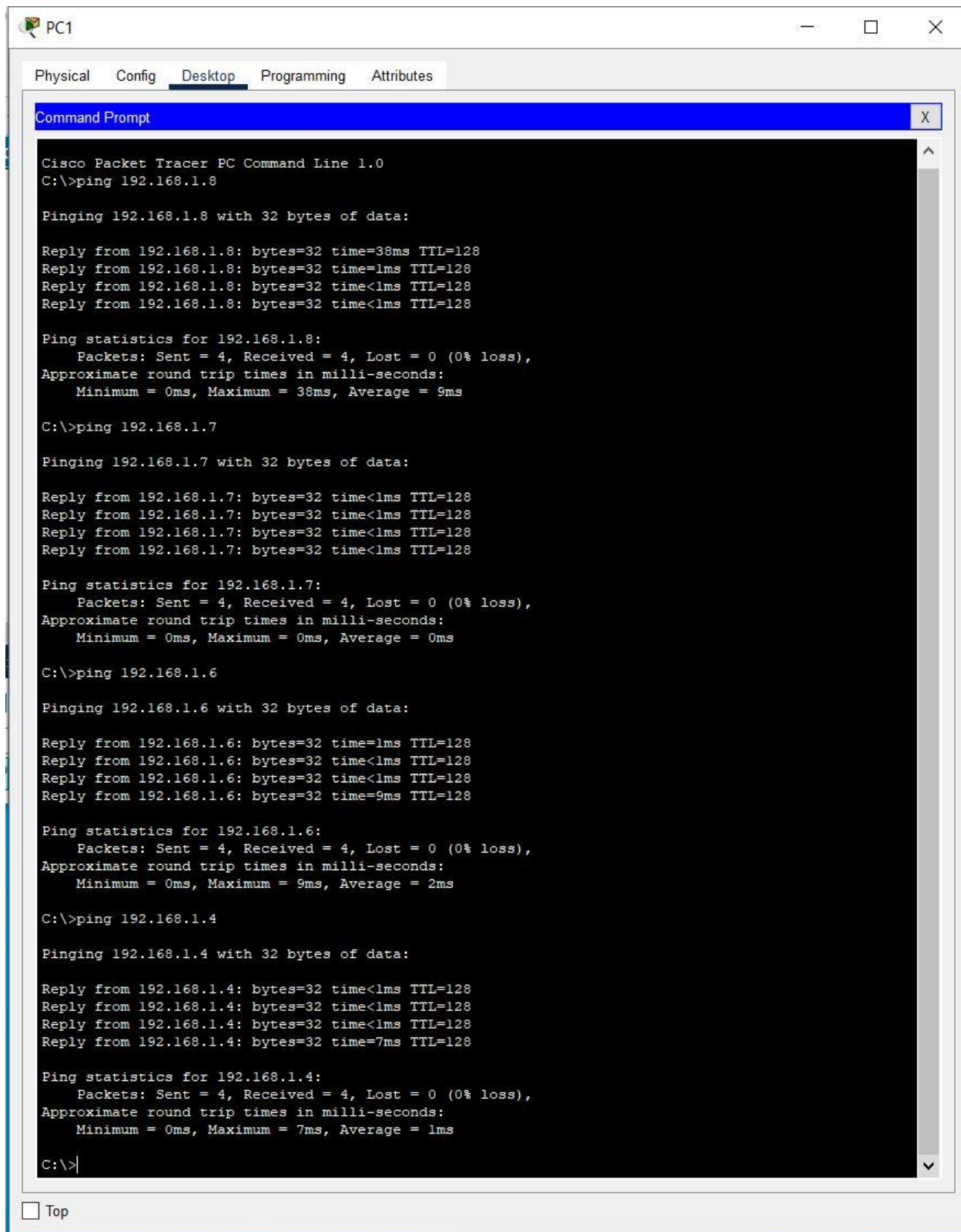Refer to https://ipcisco.com/lesson/cisco-packet-tracer-vlan-configuration-example-ccna/ and follow the instructions.

Once the exercise is finished, in a correct configuration PC1 should be able to ping PC2 and PC6, but not PC3-5. Take a screencap as proof.

PC1   —   □   X

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.8

Pinging 192.168.1.8 with 32 bytes of data:

Reply from 192.168.1.8: bytes=32 time=38ms TTL=128
Reply from 192.168.1.8: bytes=32 time=1ms TTL=128
Reply from 192.168.1.8: bytes=32 time<1ms TTL=128
Reply from 192.168.1.8: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 38ms, Average = 9ms

C:\>ping 192.168.1.7

Pinging 192.168.1.7 with 32 bytes of data:

Reply from 192.168.1.7: bytes=32 time<1ms TTL=128
Reply from 192.168.1.7: bytes=32 time<1ms TTL=128
Reply from 192.168.1.7: bytes=32 time<1ms TTL=128
Reply from 192.168.1.7: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.7:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.1.6

Pinging 192.168.1.6 with 32 bytes of data:

Reply from 192.168.1.6: bytes=32 time=1ms TTL=128
Reply from 192.168.1.6: bytes=32 time<1ms TTL=128
Reply from 192.168.1.6: bytes=32 time<1ms TTL=128
Reply from 192.168.1.6: bytes=32 time=9ms TTL=128

Ping statistics for 192.168.1.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 9ms, Average = 2ms

C:\>ping 192.168.1.4

Pinging 192.168.1.4 with 32 bytes of data:

Reply from 192.168.1.4: bytes=32 time<1ms TTL=128
Reply from 192.168.1.4: bytes=32 time<1ms TTL=128
Reply from 192.168.1.4: bytes=32 time<1ms TTL=128
Reply from 192.168.1.4: bytes=32 time=7ms TTL=128

Ping statistics for 192.168.1.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 7ms, Average = 1ms

C:\>
```

☐ Top

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
CLEI Code Number                 : COM3L00BRA
Hardware Board Revision Number   : 0x01

Switch Ports Model               SW Version          SW Image
------ ----- -----               ----------          ----------
*    1 26    WS-C2960-24TT-L      15.0(2)SE4          C2960-LANBASEK9-M

Cisco IOS Software, C2960 Software (C2960-LANBASEK9-M), Version 15.0(2)SE4, RELEASE SOFTWARE (fc1)
Technical Support: http://www.cisco.com/techsupport
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Compiled Wed 26-Jun-13 02:49 by mnguyen



Press RETURN to get started!


%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

%LINK-5-CHANGED: Interface FastEthernet0/3, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

%LINK-5-CHANGED: Interface FastEthernet0/4, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, changed state to up


Switch>enable
Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#interface fastethernet 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 2
% Access VLAN does not exist. Creating vlan 2
Switch(config-if)#
```

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Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical | Physical   x: 416, y: 325

Root   12:09:30

PC-PT
PC1

PC-PT
PC4

PC-PT
PC2

2960-24TT
Switch1

2960-24TT
Switch2

PC-PT
PC5

PC-PT
PC3

Time: 00:23:57

Wireshark

CCleaner

```
Device Name: Switch1
Custom Device Model: 2960 IOS15
Hostname: Switch

Port              Link   VLAN   IP Address      MAC Address
FastEthernet0/1   Up     1      --              00E0.B0B5.9901
FastEthernet0/2   Up     2      --              00E0.B0B5.9902
FastEthernet0/3   Up     1      --              00E0.B0B5.9903
FastEthernet0/4   Up     1      --              00E0.B0B5.9904
FastEthernet0/5   Down   1      --              00E0.B0B5.9905
FastEthernet0/6   Down   1      --              00E0.B0B5.9906
FastEthernet0/7   Down   1      --              00E0.B0B5.9907
FastEthernet0/8   Down   1      --              00E0.B0B5.9908
FastEthernet0/9   Down   1      --              00E0.B0B5.9909
FastEthernet0/10  Down   1      --              00E0.B0B5.990A
FastEthernet0/11  Down   1      --              00E0.B0B5.990B
FastEthernet0/12  Down   1      --              00E0.B0B5.990C
FastEthernet0/13  Down   1      --              00E0.B0B5.990D
FastEthernet0/14  Down   1      --              00E0.B0B5.990E
FastEthernet0/15  Down   1      --              00E0.B0B5.990F
FastEthernet0/16  Down   1      --              00E0.B0B5.9910
FastEthernet0/17  Down   1      --              00E0.B0B5.9911
FastEthernet0/18  Down   1      --              00E0.B0B5.9912
FastEthernet0/19  Down   1      --              00E0.B0B5.9913
FastEthernet0/20  Down   1      --              00E0.B0B5.9914
FastEthernet0/21  Down   1      --              00E0.B0B5.9915
FastEthernet0/22  Down   1      --              00E0.B0B5.9916
FastEthernet0/23  Down   1      --              00E0.B0B5.9917
FastEthernet0/24  Down   1      --              00E0.B0B5.9918
GigabitEthernet0/1 Down  1      --              00E0.B0B5.9919
GigabitEthernet0/2 Down  1      --              00E0.B0B5.991A
Vlan1             Down   1      <not set>       000D.BD79.C4A0

Physical Location: Intercity > Home City > Corporate Office > Main Wiring Closet > Rack > Switch0
```

Switch 2(config-if)#

Switch 2# copy runn

IOS Command Line Interface

COM3L00BRA
0x01

Version   SW Image

Your answer - itsl

ipcisco.c

Login to Wilma - Wi...

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical | Physical   x: 432, y: 305   Root   14:04:00

PC-PT
PC1

PC-PT
PC4

PC-PT
PC2

2960-24TT
Switch

2960-24TT

PC-PT

PC-PT

Time: 00:27:42

Wireshark

CCleaner

```
Device Name: Switch1
Custom Device Model: 2960 IOS15
Hostname: Switch

Port                Link    VLAN    IP Address      MAC Address
FastEthernet0/1     Up      1       --              00E0.B0B5.9901
FastEthernet0/2     Up      2       --              00E0.B0B5.9902
FastEthernet0/3     Up      2       --              00E0.B0B5.9903
FastEthernet0/4     Up      3       --              00E0.B0B5.9904
FastEthernet0/5     Down    1       --              00E0.B0B5.9905
FastEthernet0/6     Down    1       --              00E0.B0B5.9906
FastEthernet0/7     Down    1       --              00E0.B0B5.9907
FastEthernet0/8     Down    1       --              00E0.B0B5.9908
FastEthernet0/9     Down    1       --              00E0.B0B5.9909
FastEthernet0/10    Down    1       --              00E0.B0B5.990A
FastEthernet0/11    Down    1       --              00E0.B0B5.990B
FastEthernet0/12    Down    1       --              00E0.B0B5.990C
FastEthernet0/13    Down    1       --              00E0.B0B5.990D
FastEthernet0/14    Down    1       --              00E0.B0B5.990E
FastEthernet0/15    Down    1       --              00E0.B0B5.990F
FastEthernet0/16    Down    1       --              00E0.B0B5.9910
FastEthernet0/17    Down    1       --              00E0.B0B5.9911
FastEthernet0/18    Down    1       --              00E0.B0B5.9912
FastEthernet0/19    Down    1       --              00E0.B0B5.9913
FastEthernet0/20    Down    1       --              00E0.B0B5.9914
FastEthernet0/21    Down    1       --              00E0.B0B5.9915
FastEthernet0/22    Down    1       --              00E0.B0B5.9916
FastEthernet0/23    Down    1       --              00E0.B0B5.9917
FastEthernet0/24    Down    1       --              00E0.B0B5.9918
GigabitEthernet0/1  Down    1       --              00E0.B0B5.9919
GigabitEthernet0/2  Down    1       --              00E0.B0B5.991A
Vlan1               Down    1       <not set>       000D.BD79.C4A0

Physical Location: Intercity > Home City > Corporate Office > Main Wiring Closet > Rack > Switch0
```

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x: 682, y: 300   Root 17:10:00

PC-PT
PC1

PC-PT
PC4

PC-PT
PC2

2960-24TT
Switch1

PC-PT

PC-PT

Time: 00:33:48

2960 PT-Switch PT-Empty 3560 3650 IE 2000 PT-Bridge 2950-24 2950T
                            24PS 24PS

Copper Straight-Through

Wireshark

CCleaner

```
Device Name: Switch2
Custom Device Model: 2960 IOS15
Hostname: Switch

Port                Link   VLAN   IP Address   MAC Address
FastEthernet0/1     Up     1      --           0007.EC31.C501
FastEthernet0/2     Up     3      --           0007.EC31.C502
FastEthernet0/3     Up     3      --           0007.EC31.C503
FastEthernet0/4     Up     2      --           0007.EC31.C504
FastEthernet0/5     Down   1      --           0007.EC31.C505
FastEthernet0/6     Down   1      --           0007.EC31.C506
FastEthernet0/7     Down   1      --           0007.EC31.C507
FastEthernet0/8     Down   1      --           0007.EC31.C508
FastEthernet0/9     Down   1      --           0007.EC31.C509
FastEthernet0/10    Down   1      --           0007.EC31.C50A
FastEthernet0/11    Down   1      --           0007.EC31.C50B
FastEthernet0/12    Down   1      --           0007.EC31.C50C
FastEthernet0/13    Down   1      --           0007.EC31.C50D
FastEthernet0/14    Down   1      --           0007.EC31.C50E
FastEthernet0/15    Down   1      --           0007.EC31.C50F
FastEthernet0/16    Down   1      --           0007.EC31.C510
FastEthernet0/17    Down   1      --           0007.EC31.C511
FastEthernet0/18    Down   1      --           0007.EC31.C512
FastEthernet0/19    Down   1      --           0007.EC31.C513
FastEthernet0/20    Down   1      --           0007.EC31.C514
FastEthernet0/21    Down   1      --           0007.EC31.C515
FastEthernet0/22    Down   1      --           0007.EC31.C516
FastEthernet0/23    Down   1      --           0007.EC31.C517
FastEthernet0/24    Down   1      --           0007.EC31.C518
GigabitEthernet0/1  Down   1      --           0007.EC31.C519
GigabitEthernet0/2  Down   1      --           0007.EC31.C51A
Vlan1               Down   1      <not set>    0006.2AC8.B1E1

Physical Location: Intercity > Home City > Corporate Office > Main Wiring Closet > Rack > Switch2
```

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Switch(config-if)#switchport nonegotiate
Switch(config-if)#switchport trunk allowed vlan 2-4
Switch(config-if)#copy running-config startup-config
                       ^
% Invalid input detected at '^' marker.

Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Switch#show interfaces fastethernet 0/1 switchport
Name: Fa0/1
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dotlq
Operational Trunking Encapsulation: dotlq
Negotiation of Trunking: Off
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dotlq
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: 2-4
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
 --More--
```

Copy   Paste

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Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#interface fastethernet 0/1
Switch(config-if)#switchport mode trunk
Switch(config-if)#switchport nonegotiate
Switch(config-if)#switchport trunk allowed vlan 2-4
Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Switch#
Switch#show interfaces fastethernet 0/1 switchport
Name: Fa0/1
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: 2-4
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
 --More--
```

Copy   Paste

☐ Top

PC1

Physical   Config   **Desktop**   Programming   Attributes

Command Prompt   X

```
C:\>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.1.8

Pinging 192.168.1.8 with 32 bytes of data:

Reply from 192.168.1.8: bytes=32 time<1ms TTL=128
Reply from 192.168.1.8: bytes=32 time<1ms TTL=128
Reply from 192.168.1.8: bytes=32 time<1ms TTL=128
Reply from 192.168.1.8: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.1.7

Pinging 192.168.1.7 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.7:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

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