```
C:\Users\User>hostname
DESKTOP-AJC5ID6
```

```
C:\Users\User>netstat

Active Connections

  Proto  Local Address          Foreign Address        State
  TCP    127.0.0.1:49687        DESKTOP-AJC5ID6:49688  ESTABLISHED
  TCP    127.0.0.1:49688        DESKTOP-AJC5ID6:49687  ESTABLISHED
  TCP    127.0.0.1:49690        DESKTOP-AJC5ID6:49691  ESTABLISHED
  TCP    127.0.0.1:49691        DESKTOP-AJC5ID6:49690  ESTABLISHED
  TCP    127.0.0.1:52535        DESKTOP-AJC5ID6:52534  TIME_WAIT
  TCP    127.0.0.1:52537        DESKTOP-AJC5ID6:52536  TIME_WAIT
  TCP    192.168.1.67:52525     a23-54-81-235:http     TIME_WAIT
  TCP    192.168.1.67:52526     20.33.105.0:https      ESTABLISHED
  TCP    192.168.1.67:52527     a23-54-81-170:http     TIME_WAIT
  TCP    192.168.1.67:52529     a23-54-81-170:http     TIME_WAIT
  TCP    192.168.1.67:52530     a23-54-81-242:http     TIME_WAIT
  TCP    192.168.1.67:52531     4.213.25.240:https     ESTABLISHED
  TCP    192.168.1.67:52532     52.230.60.54:https     TIME_WAIT
  TCP    192.168.1.67:52538     253:https              TIME_WAIT
  TCP    192.168.1.67:52539     52.230.60.54:https     TIME_WAIT
  TCP    192.168.1.67:52541     82:https               TIME_WAIT
  TCP    192.168.1.67:52542     173:https              TIME_WAIT
  TCP    192.168.1.67:52543     a23-54-81-242:http     TIME_WAIT
  TCP    192.168.1.67:52544     52.230.60.54:https     TIME_WAIT
  TCP    192.168.1.67:52545     33:https               TIME_WAIT
  TCP    192.168.1.67:52546     173:https              TIME_WAIT
  TCP    192.168.1.67:52547     82:https               TIME_WAIT
  TCP    192.168.1.67:52548     33:https               TIME_WAIT
  TCP    192.168.1.67:52549     173:https              TIME_WAIT
  TCP    192.168.1.67:52550     82:https               TIME_WAIT
  TCP    192.168.1.67:52551     33:https               TIME_WAIT
  TCP    192.168.1.67:52552     52.168.117.171:https   TIME_WAIT
  TCP    192.168.1.67:52553     a23-10-239-251:http    ESTABLISHED
  TCP    192.168.1.67:52554     150.171.27.11:https    ESTABLISHED
  TCP    192.168.1.67:52557     a23-38-84-202:https    ESTABLISHED
  TCP    192.168.1.67:52560     65:https               ESTABLISHED
  TCP    192.168.1.67:52561     server-18-67-195-52:https   ESTABLISHED
  TCP    192.168.1.67:52562     server-108-158-49-186:http  ESTABLISHED
  TCP    192.168.1.67:52563     server-108-158-49-186:http  ESTABLISHED
```

Ethernet
Network cable unplugged
Qualcomm Atheros AR8151 PCI-E...

Wi-Fi
Why_So_Serious_2.4
802.11n Wireless LAN Card

```
C:\Users\User>tracert www.google.com

Tracing route to www.google.com [172.217.26.100]
over a maximum of 30 hops:

  1     4 ms     7 ms     3 ms  192.168.1.254
  2    10 ms     7 ms    11 ms  27.34.0.1
  3     9 ms     8 ms    19 ms  be-83-46.45.gwc-ndc-core-01.wlink.com.np [202.79.45.46]
  4    10 ms     4 ms     7 ms  ae-20-136.41.gwj-htda-core-01.wlink.com.np [202.79.41.136]
  5     6 ms    10 ms     9 ms  ae-21-139.41.gwj-btwl-core-01.wlink.com.np [202.79.41.139]
  6    10 ms    10 ms     6 ms  ae52-ipt-bhwa-01.wlink.com.np [72.9.128.67]
  7     *        *        *     Request timed out.
  8    17 ms    22 ms    23 ms  142.250.174.2
  9    21 ms    22 ms    28 ms  192.178.83.35
 10    18 ms    19 ms    21 ms  142.251.52.217
 11    21 ms    25 ms    21 ms  kix05s01-in-f100.1e100.net [172.217.26.100]

Trace complete.
```

```
C:\Users\User>ping www.google.com

Pinging www.google.com [172.217.26.100] with 32 bytes of data:
Reply from 172.217.26.100: bytes=32 time=161ms TTL=114
Reply from 172.217.26.100: bytes=32 time=159ms TTL=114
Reply from 172.217.26.100: bytes=32 time=145ms TTL=114
Reply from 172.217.26.100: bytes=32 time=18ms TTL=114

Ping statistics for 172.217.26.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 18ms, Maximum = 161ms, Average = 120ms
```

```
C:\Users\User>arp -a

Interface: 192.168.1.67 --- 0x4
  Internet Address      Physical Address      Type
  192.168.1.254         04-75-f9-16-92-5c     dynamic
  192.168.1.255         ff-ff-ff-ff-ff-ff     static
  224.0.0.22            01-00-5e-00-00-16     static
  224.0.0.251           01-00-5e-00-00-fb     static
  224.0.0.252           01-00-5e-00-00-fc     static
  255.255.255.255       ff-ff-ff-ff-ff-ff     static

Interface: 169.254.14.13 --- 0x13
  Internet Address      Physical Address      Type
  169.254.255.255       ff-ff-ff-ff-ff-ff     static
  224.0.0.22            01-00-5e-00-00-16     static
  224.0.0.251           01-00-5e-00-00-fb     static
  224.0.0.252           01-00-5e-00-00-fc     static
  239.255.255.250       01-00-5e-7f-ff-fa     static
```

```
C:\Users\User>systeminfo

Host Name:                 DESKTOP-AJC5ID6
OS Name:                   Microsoft Windows 10 Pro
OS Version:                10.0.19045 N/A Build 19045
OS Manufacturer:           Microsoft Corporation
OS Configuration:          Standalone Workstation
OS Build Type:             Multiprocessor Free
Registered Owner:          User
Registered Organization:
Product ID:                00331-10000-00001-AA173
Original Install Date:     9/30/2020, 3:33:40 AM
System Boot Time:          9/2/2025, 6:19:25 PM
System Manufacturer:       ASUSTeK Computer Inc.
System Model:              K54C
System Type:               x64-based PC
Processor(s):              1 Processor(s) Installed.
                           [01]: Intel64 Family 6 Model 42 Stepping 7 GenuineIntel ~2400 Mhz
BIOS Version:              American Megatrends Inc. K54C.207, 4/18/2012
Windows Directory:         C:\WINDOWS
System Directory:          C:\WINDOWS\system32
Boot Device:               \Device\HarddiskVolume1
System Locale:             en-us;English (United States)
Input Locale:             en-us;English (United States)
Time Zone:                 (UTC+05:45) Kathmandu
Total Physical Memory:     6,048 MB
Available Physical Memory: 2,219 MB
Virtual Memory: Max Size:  8,864 MB
Virtual Memory: Available: 4,116 MB
Virtual Memory: In Use:    4,748 MB
Page File Location(s):     C:\pagefile.sys
Domain:                    WORKGROUP
Logon Server:              \\DESKTOP-AJC5ID6
Hotfix(s):                 20 Hotfix(s) Installed.
                           [01]: KB5020872
                           [02]: KB5056577
                           [03]: KB4561600
                           [04]: KB4562830
                           [05]: KB4577266
                           [06]: KB4577586
                           [07]: KB4580325
                           [08]: KB4586864
```

```
Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
   IPv4 Address. . . . . . . . . . . : 192.168.13.3
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . :

C:\Users\User>
```

```
C:\Users\User>getmac

Physical Address       Transport Name
==================     =========================================================
E0-06-E6-2A-3C-EC      \Device\Tcpip_{21C61488-32A5-40D6-8D85-C9B32CDEF21F}
10-BF-48-22-1E-7D      Media disconnected
00-FF-B6-98-A1-CC      Media disconnected
00-FF-65-99-06-82      Media disconnected
0A-00-27-00-00-13      \Device\Tcpip_{CCE0EB84-8AD5-4153-A94F-1319ECC5453A}
```

```
C:\Users\User>route print
===========================================================================
Interface List
  3...10 bf 48 22 1e 7d ......Qualcomm Atheros AR8151 PCI-E Gigabit Ethernet Controller (NDIS 6.30)
  9...00 ff 65 99 06 82 ......TAP-NordVPN Windows Adapter V9
 19...0a 00 27 00 00 13 ......VirtualBox Host-Only Ethernet Adapter
 16...00 ff b6 98 a1 cc ......TAP-ProtonVPN Windows Adapter V9
 21...e0 06 e6 2a 3c ee ......Microsoft Wi-Fi Direct Virtual Adapter
  6...e0 06 e6 2a 3c ef ......Microsoft Wi-Fi Direct Virtual Adapter #2
  4...e0 06 e6 2a 3c ec ......802.11n Wireless LAN Card
  1...........................Software Loopback Interface 1
===========================================================================

IPv4 Route Table
===========================================================================
Active Routes:
Network Destination        Netmask          Gateway       Interface  Metric
          0.0.0.0          0.0.0.0    192.168.1.254    192.168.1.67     50
        127.0.0.0        255.0.0.0         On-link         127.0.0.1    331
        127.0.0.1  255.255.255.255         On-link         127.0.0.1    331
  127.255.255.255  255.255.255.255         On-link         127.0.0.1    331
      169.254.0.0      255.255.0.0         On-link     169.254.14.13    281
     169.254.14.13  255.255.255.255         On-link     169.254.14.13    281
  169.254.255.255  255.255.255.255         On-link     169.254.14.13    281
      192.168.1.0    255.255.255.0         On-link      192.168.1.67    306
     192.168.1.67  255.255.255.255         On-link      192.168.1.67    306
    192.168.1.255  255.255.255.255         On-link      192.168.1.67    306
        224.0.0.0        240.0.0.0         On-link         127.0.0.1    331
        224.0.0.0        240.0.0.0         On-link     169.254.14.13    281
        224.0.0.0        240.0.0.0         On-link      192.168.1.67    306
  255.255.255.255  255.255.255.255         On-link         127.0.0.1    331
  255.255.255.255  255.255.255.255         On-link     169.254.14.13    281
  255.255.255.255  255.255.255.255         On-link      192.168.1.67    306
===========================================================================
Persistent Routes:
  None

IPv6 Route Table
===========================================================================
Active Routes:
 If Metric Network Destination      Gateway
  1    331 ::1/128                  On-link
  1    331 ff00::/8                 On-link
```

```
C:\Users\User>ping 192.168.13.3

Pinging 192.168.13.3 with 32 bytes of data:
Reply from 192.168.13.3: bytes=32 time<1ms TTL=128
Reply from 192.168.13.3: bytes=32 time<1ms TTL=128
Reply from 192.168.13.3: bytes=32 time<1ms TTL=128
Reply from 192.168.13.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.13.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

```
C:\Users\User>tasklist

Image Name                     PID Session Name        Session#    Mem Usage
========================= ======== ================ =========== ============
System Idle Process              0 Services                   0          8 K
System                           4 Services                   0     11,864 K
Registry                       100 Services                   0     73,532 K
smss.exe                       492 Services                   0      1,100 K
csrss.exe                      664 Services                   0      5,480 K
wininit.exe                    772 Services                   0      6,792 K
csrss.exe                      780 Console                    1      5,580 K
services.exe                   844 Services                   0     10,252 K
lsass.exe                      852 Services                   0     24,812 K
winlogon.exe                   916 Console                    1     11,248 K
svchost.exe                    584 Services                   0     35,912 K
fontdrvhost.exe                640 Services                   0      4,020 K
fontdrvhost.exe                612 Console                    1      5,356 K
svchost.exe                    960 Services                   0     17,744 K
svchost.exe                   1068 Services                   0      7,756 K
svchost.exe                   1176 Services                   0     11,020 K
dwm.exe                       1244 Console                    1     65,428 K
svchost.exe                   1288 Services                   0     16,044 K
svchost.exe                   1304 Services                   0      9,208 K
svchost.exe                   1448 Services                   0      8,772 K
svchost.exe                   1544 Services                   0      7,568 K
svchost.exe                   1576 Services                   0      6,124 K
svchost.exe                   1716 Services                   0      5,224 K
svchost.exe                   1728 Services                   0     22,796 K
svchost.exe                   1748 Services                   0     16,372 K
wsc_proxy.exe                 1884 Services                   0     10,804 K
svchost.exe                   1900 Services                   0     13,676 K
svchost.exe                   1908 Services                   0      7,664 K
svchost.exe                   1932 Services                   0     51,636 K
svchost.exe                   1972 Services                   0     12,860 K
svchost.exe                   1980 Services                   0      7,112 K
svchost.exe                   1996 Services                   0      5,980 K
Memory Compression            2080 Services                   0    360,096 K
svchost.exe                   2120 Services                   0      9,652 K
svchost.exe                   2172 Services                   0     10,408 K
svchost.exe                   2216 Services                   0     10,944 K
svchost.exe                   2264 Services                   0     12,188 K
svchost.exe                   2516 Services                   0      7,992 K
svchost.exe                   2580 Services                   0      7,940 K
svchost.exe                   2692 Services                   0     19,264 K
```

Internet Protocol Version 4 (TCP/IPv4) Properties ✕

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically
◉ Use the following IP address:

IP address: 192 . 168 . 13 . 1
Subnet mask: 255 . 255 . 255 . 0
Default gateway: .   .   .

○ Obtain DNS server address automatically
◉ Use the following DNS server addresses:

Preferred DNS server: .   .   .
Alternate DNS server: .   .   .

☐ Validate settings upon exit   [Advanced...]

[OK] [Cancel]

```
C:\Users\User>ipconfig

Windows IP Configuration


Ethernet adapter Ethernet:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Ethernet adapter Ethernet 2:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Ethernet adapter VirtualBox Host-Only Network:

   Connection-specific DNS Suffix  . :
   Autoconfiguration IPv4 Address. . : 169.254.14.13
   Subnet Mask . . . . . . . . . . . : 255.255.0.0
   Default Gateway . . . . . . . . . :

Unknown adapter Local Area Connection:

   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* 2:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
   IPv4 Address. . . . . . . . . . . : 192.168.13.3
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . :
```

```
C:\Users\User>ipconfig/all

Windows IP Configuration

   Host Name . . . . . . . . . . . . : DESKTOP-AJC5ID6
   Primary Dns Suffix  . . . . . . . :
   Node Type . . . . . . . . . . . . : Hybrid
   IP Routing Enabled. . . . . . . . : No
   WINS Proxy Enabled. . . . . . . . : No

Ethernet adapter Ethernet:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :
   Description . . . . . . . . . . . : Qualcomm Atheros AR8151 PCI-E Gigabit Ethernet Controller (NDIS 6.30)
   Physical Address. . . . . . . . . : 10-BF-48-22-1E-7D
   DHCP Enabled. . . . . . . . . . . : Yes
   Autoconfiguration Enabled . . . . : Yes

Ethernet adapter Ethernet 2:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :
   Description . . . . . . . . . . . : TAP-NordVPN Windows Adapter V9
   Physical Address. . . . . . . . . : 00-FF-65-99-06-82
   DHCP Enabled. . . . . . . . . . . : Yes
   Autoconfiguration Enabled . . . . : Yes

Ethernet adapter VirtualBox Host-Only Network:

   Connection-specific DNS Suffix  . :
   Description . . . . . . . . . . . : VirtualBox Host-Only Ethernet Adapter
   Physical Address. . . . . . . . . : 0A-00-27-00-00-13
   DHCP Enabled. . . . . . . . . . . : No
   Autoconfiguration Enabled . . . . : Yes
   Autoconfiguration IPv4 Address. . : 169.254.14.13(Preferred)
   Subnet Mask . . . . . . . . . . . : 255.255.0.0
   Default Gateway . . . . . . . . . :
   NetBIOS over Tcpip. . . . . . . . : Enabled
```

Run ✕

Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.

Open: ncpa.cpl ▾

[OK] [Cancel] [Browse...]

Area of triangle: 3
Area of square: 16

Full time salary: 20000
Part time salary: 8000

Dog sound: vow vow!
Cat sound: meow meow!

Addition: 30
Subtraction: 10
Product: 1000

Current balance after deposit: 3000
Current balance after withdraw: 2500

Number of objects created: 3

Connected to MySQL server successfully.
Database 'user' created successfully.

MyApp
1.0.0
Asia/Kathmandu

S.N.	Program Title	Submission Date	Signature	Remarks
1.	Create a PHP class 'Book' with title, author, and price properties, and a method to display book properties.	2025/09/04		
2.	Write a PHP program to set and get private properties of a 'Laptop' class using getter and setter methods.			
3.	Create a class 'BankAccount' with deposit and withdraw methods and display the balance.			
4.	Write a PHP program to demonstrate constructor and destructor in a 'Mobile class.			
5.	Create a base class 'Person' and a derived class 'Student' that adds roll number and grade.			
6.	Write a PHP program to show method overriding using a 'Vehicle' base class and a 'Car' subclass.			
7.	Create a class 'Employee' with salary property and extend it into a 'Manager' class that calculates bonus.			
8.	Write a PHP program to demonstrate the use of parent constructor using 'parent::__construct()'			
9.	Make a class 'Shape' and create subclasses 'Circle' and 'Rectangle' to calculate area. (runtime polymorphism)			
10.	Create interface 'Payment' with methods 'pay()' and 'refund()'. Implement it in 'CreditCard' and 'PayPal'			
11.	PHP program with interface 'Printable' that forces Book and Magazine to implement getPrintDetails().	2025/09/04		
12.	Create interface Logger with logInfo() and logError(). Implement them in FileLogger, DatabaseLogger.			
13.	Write an abstract class `Animal` with an abstract method `sound()`. Implement it in `Dog` and `Cat`.			
14.	Create an abstract class `Shape` with an abstract method `area()`. Implement it in `Triangle`, `Square`.			
15.	Make an abstract class Employee with abstract method calculateSalary() and extend it for FullTimeEmployee and PartTimeEmployee.			
16.	PHP program to create a `Counter` class with a static property to count how many objects are created.			
17.	Create a class `MathOperations` with static methods for `add()`, `subtract()`, and `multiply()`.			
18.	Write a PHP script to demonstrate static properties sharing values across multiple objects.			
19.	Make a `Configuration` class that stores settings in static properties. Display without creating an object.			
20.	Create a class Database with static method getConnection(). (singleton pattern idea)			