CSE 2010 SECURE CODING

LAB SLOT –L23+L24   NAME:-M.KARTHIK

REG NO-19BCN7222

LAB EXPERIMENT 3

QUESTION 1:

Command to find browser installation location

```
C:\Windows\system32>where /R C:\ *.exe |findstr firefox.exe
C:\Program Files (x86)\Mozilla Firefox\firefox.exe

C:\Windows\system32>where /R C:\ *.exe |findstr chrome.exe
C:\Program Files (x86)\Google\Chrome\Application\chrome.exe
```

QUESTION 2:

Check Scheduled tasks using schtasks

```
C:\Windows\system32>schtasks

Folder: \
TaskName                                  Next Run Time          Status
======================================== ====================== ================
GoogleUpdateTaskMachineCore               2/13/2021 2:31:18 PM   Ready
GoogleUpdateTaskMachineUA                 2/13/2021 12:31:18 PM  Ready
JavaUpdateSched                           N/A                    Ready
MicrosoftEdgeUpdateTaskMachineCore        2/14/2021 9:18:29 AM   Ready
MicrosoftEdgeUpdateTaskMachineUA          2/13/2021 12:48:29 PM  Ready
OneDrive Standalone Update Task-S-1-5-21 2/14/2021 10:29:15 AM  Ready

Folder: \Microsoft
TaskName                                  Next Run Time          Status
======================================== ====================== ================
INFO: There are no scheduled tasks presently available at your access level.

Folder: \Microsoft\Office
TaskName                                  Next Run Time          Status
======================================== ====================== ================
Office 15 Subscription Heartbeat          2/14/2021 5:49:57 AM   Ready
OfficeTelemetryAgentFallBack              N/A                    Ready
OfficeTelemetryAgentLogOn                 N/A                    Ready

Folder: \Microsoft\OneCore
TaskName                                  Next Run Time          Status
======================================== ====================== ================
INFO: There are no scheduled tasks presently available at your access level.

Folder: \Microsoft\Windows
TaskName                                  Next Run Time          Status
======================================== ====================== ================
INFO: There are no scheduled tasks presently available at your access level.
```

```
Folder: \Microsoft\Windows\.NET Framework
TaskName                                  Next Run Time           Status
========================================  ======================  ===============
.NET Framework NGEN v4.0.30319            N/A                     Ready
.NET Framework NGEN v4.0.30319 64         N/A                     Ready
.NET Framework NGEN v4.0.30319 64 Critic  N/A                     Disabled
.NET Framework NGEN v4.0.30319 Critical   N/A                     Disabled


Folder: \Microsoft\Windows\Active Directory Rights Management Services Client
TaskName                                  Next Run Time           Status
========================================  ======================  ===============
AD RMS Rights Policy Template Management   N/A                     Disabled
AD RMS Rights Policy Template Management   N/A                     Ready


Folder: \Microsoft\Windows\AppID
TaskName                                  Next Run Time           Status
========================================  ======================  ===============
EDP Policy Manager                        N/A                     Ready
PolicyConverter                           N/A                     Disabled
VerifiedPublisherCertStoreCheck           N/A                     Disabled


Folder: \Microsoft\Windows\Application Experience
TaskName                                  Next Run Time           Status
========================================  ======================  ===============
Microsoft Compatibility Appraiser         2/14/2021 3:17:10 AM    Ready
ProgramDataUpdater                        N/A                     Ready
StartupAppTask                            N/A                     Ready


Folder: \Microsoft\Windows\ApplicationData
TaskName                                  Next Run Time           Status
========================================  ======================  ===============
appuriverifierdaily                       N/A                     Ready
appuriverifierinstall                     N/A                     Ready
CleanupTemporaryState                     N/A                     Ready
DsSvcCleanup                              N/A                     Ready
```

```
Folder: \Microsoft\Windows\AppxDeploymentClient
TaskName                                 Next Run Time          Status
======================================== ====================== ===============
Pre-staged app cleanup                   N/A                    Disabled

Folder: \Microsoft\Windows\Autochk
TaskName                                 Next Run Time          Status
======================================== ====================== ===============
Proxy                                    N/A                    Ready

Folder: \Microsoft\Windows\BitLocker
TaskName                                 Next Run Time          Status
======================================== ====================== ===============
BitLocker Encrypt All Drives             N/A                    Ready
BitLocker MDM policy Refresh             N/A                    Ready

Folder: \Microsoft\Windows\Bluetooth
TaskName                                 Next Run Time          Status
======================================== ====================== ===============
UninstallDeviceTask                      N/A                    Ready

Folder: \Microsoft\Windows\BrokerInfrastructure
TaskName                                 Next Run Time          Status
======================================== ====================== ===============
BgTaskRegistrationMaintenanceTask        N/A                    Ready

Folder: \Microsoft\Windows\CertificateServicesClient
TaskName                                 Next Run Time          Status
======================================== ====================== ===============
AikCertEnrollTask                        N/A                    Ready
CryptoPolicyTask                         N/A                    Ready
KeyPreGenTask                            N/A                    Ready
SystemTask                               N/A                    Ready
UserTask                                 N/A                    Ready
UserTask-Roam                            N/A                    Ready
```

```
Folder: \Microsoft\Windows\Chkdsk
TaskName                                Next Run Time           Status
======================================= ====================== ==============
ProactiveScan                           N/A                     Ready
SyspartRepair                           N/A                     Ready

Folder: \Microsoft\Windows\Clip
TaskName                                Next Run Time           Status
======================================= ====================== ==============
License Validation                      N/A                     Disabled

Folder: \Microsoft\Windows\CloudExperienceHost
TaskName                                Next Run Time           Status
======================================= ====================== ==============
CreateObjectTask                        N/A                     Ready

Folder: \Microsoft\Windows\Customer Experience Improvement Program
TaskName                                Next Run Time           Status
======================================= ====================== ==============
Consolidator                            2/13/2021 12:00:00 PM   Ready
UsbCeip                                 N/A                     Ready

Folder: \Microsoft\Windows\Data Integrity Scan
TaskName                                Next Run Time           Status
======================================= ====================== ==============
Data Integrity Scan                     2/19/2021 12:41:39 AM   Ready
Data Integrity Scan for Crash Recovery  N/A                     Ready

Folder: \Microsoft\Windows\Defrag
TaskName                                Next Run Time           Status
======================================= ====================== ==============
ScheduledDefrag                         N/A                     Ready

Folder: \Microsoft\Windows\Device Information
TaskName                                Next Run Time           Status
======================================= ====================== ==============
Device                                  2/14/2021 4:15:46 AM    Ready
```

```
Folder: \Microsoft\Windows\DeviceDirectoryClient
TaskName                                    Next Run Time           Status
================================== ====================== ===============
HandleCommand                               N/A                     Ready
HandleWnsCommand                            N/A                     Ready
IntegrityCheck                              N/A                     Disabled
LocateCommandUserSession                    N/A                     Ready
RegisterDeviceAccountChange                 N/A                     Ready
RegisterDeviceLocationRightsChange          N/A                     Ready
RegisterDevicePeriodic24                    2/13/2021 4:05:08 PM    Ready
RegisterDevicePolicyChange                  N/A                     Ready
RegisterDeviceProtectionStateChanged        N/A                     Ready
RegisterDeviceSettingChange                 N/A                     Ready
RegisterDeviceWnsFallback                   2/25/2021 11:13:01 AM   Ready
RegisterUserDevice                          N/A                     Ready


Folder: \Microsoft\Windows\Diagnosis
TaskName                                    Next Run Time           Status
================================== ====================== ===============
RecommendedTroubleshootingScanner           N/A                     Ready
Scheduled                                   N/A                     Ready


Folder: \Microsoft\Windows\DirectX
TaskName                                    Next Run Time           Status
================================== ====================== ===============
DirectXDatabaseUpdater                      N/A                     Ready
DXGIAdapterCache                            N/A                     Ready


Folder: \Microsoft\Windows\DiskCleanup
TaskName                                    Next Run Time           Status
================================== ====================== ===============
SilentCleanup                               N/A                     Ready


Folder: \Microsoft\Windows\DiskDiagnostic
TaskName                                    Next Run Time           Status
================================== ====================== ===============
Microsoft-Windows-DiskDiagnosticDataColl    N/A                     Disabled
Microsoft-Windows-DiskDiagnosticResolver    N/A                     Disabled
```

QUESTION 3:

Basics

- Create a task name "Reg.no_Task1" to run on a specific time
- Change the time of the scheduled task
- Delete the scheduled task
- Schedule an another task to run only on Weekdays
- Schedule an another task to run only on Weekends

```
C:\Users\m.karthik vijay sai>schtasks /create /st 14:00 /tn "19BCN7222" /tr "c:runme.bat" /sc daily
SUCCESS: The scheduled task "19BCN7222" has successfully been created.

C:\Users\m.karthik vijay sai>
```

```
C:\Users\m.karthik vijay sai>schtasks /change /tn "19BCN7222" /st 09:00
Please enter the run as password for m.karthik vijay sai:

WARNING: When the run-as password is empty, the scheduled task may not run because of the security policy.
SUCCESS: The parameters of scheduled task "19BCN7222" have been changed.

C:\Users\m.karthik vijay sai>schtasks /delete /tn "19BCN7222"
WARNING: Are you sure you want to remove the task "19BCN7222" (Y/N)?
ERROR: Invalid input.
Type "SCHTASKS /DELETE /?" for usage.

C:\Users\m.karthik vijay sai>schtasks /delete /tn "19BCN7222"
WARNING: Are you sure you want to remove the task "19BCN7222" (Y/N)? y
SUCCESS: The scheduled task "19BCN7222" was successfully deleted.

C:\Users\m.karthik vijay sai>schtasks /create /sc weekly /d mon,tue,wed,thu,fri /tn "19BCN7222_task2" /tr "c:runme.bat" /st 00:00
SUCCESS: The scheduled task "19BCN7222_task2" has successfully been created.

C:\Users\m.karthik vijay sai>schtasks /create /sc weekly /d sat,sun /tn"19BCN7222_task3" /tr "c:runme.bat" st 00:00
ERROR: Invalid argument/option - '/tn19BCN7222_task3'.
Type "SCHTASKS /CREATE /?" for usage.

C:\Users\m.karthik vijay sai>schtasks /create /sc weekly /d sat,sun /tn"19BCN7222_task3" /tr "c:runme.bat" /st 00:00
ERROR: Invalid argument/option - '/tn19BCN7222_task3'.
Type "SCHTASKS /CREATE /?" for usage.

C:\Users\m.karthik vijay sai>schtasks /create /sc weekly /d sat,sun /tn "19BCN7222_task3" /tr "c:runme.bat" /st 00:00
SUCCESS: The scheduled task "19BCN7222_task3" has successfully been created.

C:\Users\m.karthik vijay sai>schtasks /delete /tn "19BCN7222_task2"
WARNING: Are you sure you want to remove the task "19BCN7222_task2" (Y/N)? y
SUCCESS: The scheduled task "19BCN7222_task2" was successfully deleted.

C:\Users\m.karthik vijay sai>schtasks /delete /tn "19BCN7222_task3"
WARNING: Are you sure you want to remove the task "19BCN7222_task3" (Y/N)? y
SUCCESS: The scheduled task "19BCN7222_task3" was successfully deleted.

C:\Users\m.karthik vijay sai>
```

QUESTION 4:

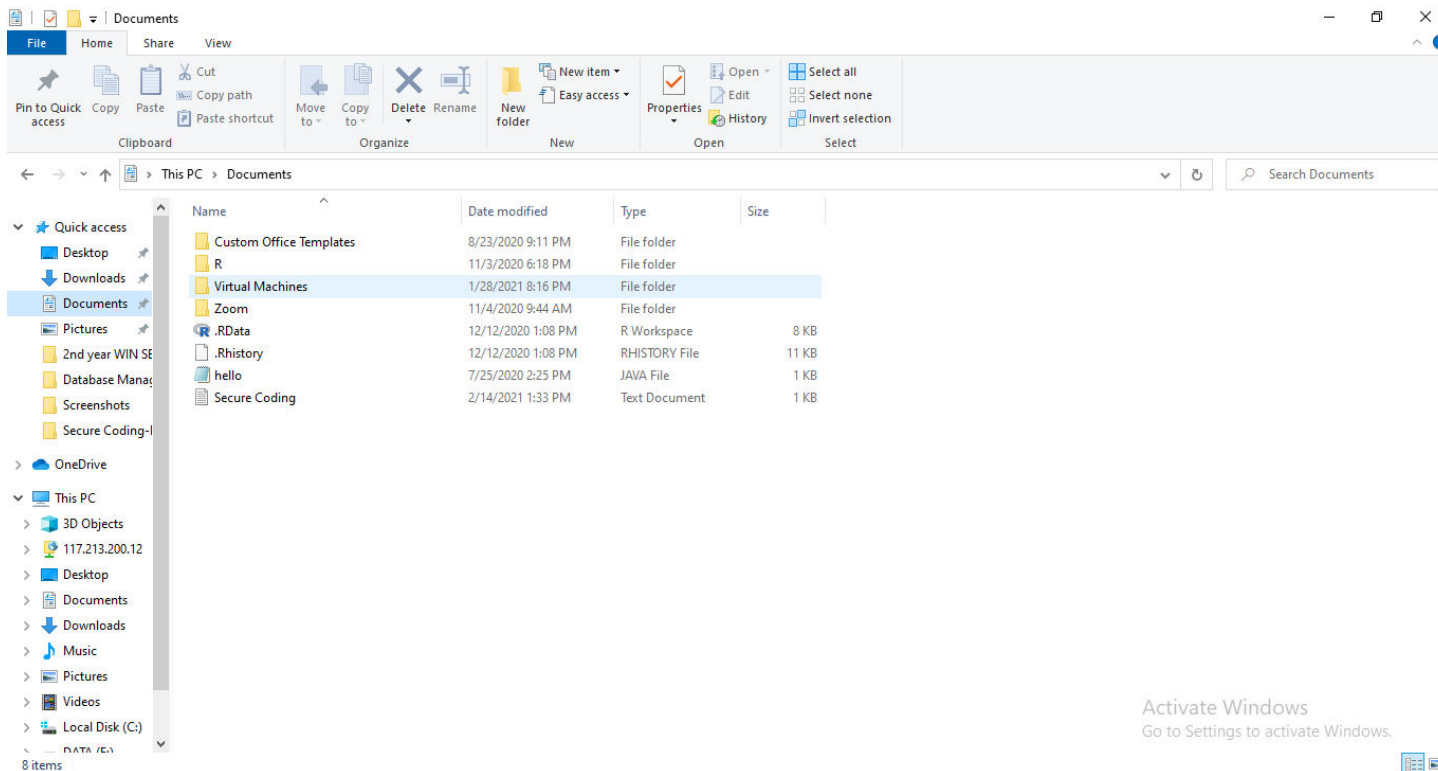## Find a command that searches for text string in a file or files

```
C:\Windows\system32>type "C:\Users\Lenovo\Desktop\Secure Coding.txt"
Secure coding is the practice of developing computer software in a way that guards against the accidental introduction of security vulnerabilities.
Defects, bugs and logic flaws are consistently the primary cause of commonly exploited software vulnerabilities.
Through the analysis of thousands of reported vulnerabilities, security professionals have discovered that most vulnerabilities stem
from a relatively small number of common software programming errors. By identifying the insecure coding practices that lead to
these errors and educating developers on secure alternatives, organizations can take proactive steps to help significantly reduce or eliminate
vulnerabilities in software before deployment.
C:\Windows\system32>findstr /N /C:"vulnerabilities" "C:\Users\Lenovo\Desktop\Secure Coding.txt"
1:Secure coding is the practice of developing computer software in a way that guards against the accidental introduction of security vulnerabilities.
2:Defects, bugs and logic flaws are consistently the primary cause of commonly exploited software vulnerabilities.
3:Through the analysis of thousands of reported vulnerabilities, security professionals have discovered that most vulnerabilities stem
6:vulnerabilities in software before deployment.
C:\Windows\system32>
```

QUESTION 5:

Classwork

- Write a file replication code to copy the same file for 50 times on the same directory.

File before replication: File name-(Secure Coding.txt)

File Replication:

Code-

for /l %A in (1,1,50) do copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-%A.txt"

```
C:\Windows\system32>for /l %A in (1,1,50) do copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-%A.txt"

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-1.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-2.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-3.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-4.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-5.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-6.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-7.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-8.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-9.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-10.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-11.txt"
```

```
C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-41.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-42.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-43.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-44.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-45.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-46.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-47.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-48.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-49.txt"
        1 file(s) copied.

C:\Windows\system32>copy "C:\Users\Lenovo\Documents\Secure Coding.txt" "C:\Users\Lenovo\Documents\Secure Coding-50.txt"
        1 file(s) copied.

C:\Windows\system32>
```

File Replication Output: