

CSE 2010 || Secure Coding

WIN 20-21

Lab: 4

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1.

- Write a python script to print hello world.

```
C:\Users\rbchs\Desktop\Secure Coding\Lab_4>python3 pyphello.py
Hello, world!

C:\Users\rbchs\Desktop\Secure Coding\Lab_4>cd..

C:\Users\rbchs\Desktop\Secure Coding>cd..

C:\Users\rbchs\Desktop>cd..

C:\Users\rbchs>pip install pyinstaller
Collecting pyinstaller
  Downloading pyinstaller-4.2.tar.gz (3.6 MB)
    | 3.6 MB 172 kB/s
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Preparing wheel metadata ... done
Requirement already satisfied: setuptools in c:\users\rbchs\appdata\local\programs\python\python39\lib\site-packages (49.2.1)
Collecting pyinstaller-hooks-contrib>=2020.6
  Downloading pyinstaller_hooks_contrib-2020.11-py2.py3-none-any.whl (172 kB)
    | 172 kB 251 kB/s
Collecting pywin32-ctypes>=0.2.0; sys.platform == "win32"
```

- Convert the script into executable (use pyinstaller or py2exe – any of your choice).

```
Windows PowerShell
PS C:\Users\rbchs\Desktop\Secure Coding\Lab_4> pyinstaller --onefile -w pyphello.py
82 INFO: PyInstaller: 4.2
82 INFO: Python: 3.9.2
83 INFO: Platform: Windows-10-10.0.18362-SP0
84 INFO: wrote C:\Users\rbchs\Desktop\Secure Coding\Lab_4\pyphello.spec
85 INFO: UPX is not available.
87 INFO: Extending PYTHONPATH with paths
['C:\\Users\\rbchs\\Desktop\\Secure Coding\\Lab_4',
'C:\\Users\\rbchs\\Desktop\\Secure Coding\\Lab_4']
90 INFO: checking Analysis
91 INFO: Building Analysis because Analysis-00.toc is non-existent
94 INFO: Initializing module dependency graph...
95 INFO: Caching module graph hooks...
100 WARNING: Several hooks defined for module 'win32ctypes.core'. Please take care they do not conflict.
104 INFO: Analyzing base_library.zip ...
1716 INFO: Processing pre-find module path hook distutils from 'c:\\users\\rbchs\\appdata\\local\\programs\\python\\python39\\lib\\site-packages\\PyInstaller\\hooks\\pre_find_module_path\\hook-distutils.py'.
1717 INFO: distutils: retargeting to non-venv dir 'c:\\users\\rbchs\\appdata\\local\\programs\\python\\python39\\lib'
3907 INFO: Caching module dependency graph...
3989 INFO: running Analysis-00.toc
4001 INFO: Adding Microsoft.Windows.Common-Controls to dependent assemblies of final executable
required by c:\users\rbchs\appdata\local\programs\python\python39\python.exe
```

- Schedule a task named "Python execution" to run the above executable on the first Monday of every month.

```
C:\Users\rbchs>schtasks /Create /SC MONTHLY /MO first /D MON /TN Python_execution /TR C:\Users\rbchs\Desktop\SecureCoding\Lab_4\dist\pyphello.exe
SUCCESS: The scheduled task "Python_execution" has successfully been created.

C:\Users\rbchs>schtasks /delete /TN Python_execution
WARNING: Are you sure you want to remove the task "Python_execution" (Y/N)? y
SUCCESS: The scheduled task "Python_execution" was successfully deleted.

C:\Users\rbchs>
```

2.

- Schedule a task named "Executer" on your machine to run calculator for every five minutes starting from the specified start time with no end

```
C:\Users\rbchs>SCHTASKS /Create /SC MINUTE /MO 5 /TN Executer /TR calc.exe /ST 12:00 /ET 12:30 /SD 22/02/2021
SUCCESS: The scheduled task "Executer" has successfully been created.

C:\Users\rbchs>schtasks /delete /TN Executer
WARNING: Are you sure you want to remove the task "Executer" (Y/N)? y
SUCCESS: The scheduled task "Executer" was successfully deleted.
```

- Schedule a task named "Executer2" to run notepad starting at 5:00PM and automatically terminating at 5:40PM hours every day

```
C:\Users\rbchs>SCHTASKS /Create /SC Daily /TN Executer2 /TR notepad.exe /ST 17:00 /ET 17:40 /SD 22/02/2021
SUCCESS: The scheduled task "Executer2" has successfully been created.

C:\Users\rbchs>schtasks /delete /TN notepad.exe
ERROR: The specified task name "notepad.exe" does not exist in the system.

C:\Users\rbchs>schtasks /delete /TN Executer2
WARNING: Are you sure you want to remove the task "Executer2" (Y/N)? y
SUCCESS: The scheduled task "Executer2" was successfully deleted.
```

3.

- Schedule a task named "Logger" to log your internet explorer activity to a separate text file.

```
C:\Users\rbchs>SCHTASKS /Create /SC Once /TN Logger /TR "'c:\program files\internet explorer\iexplorer.exe' \"c:\log data\today.xml\"" /ST 14:00 /SD 22/02/2021
SUCCESS: The scheduled task "Logger" has successfully been created.

C:\Users\rbchs>schtasks /delete Logger
ERROR: Invalid argument/option - 'Logger'.
Type "SCHTASKS /DELETE /?" for usage.

C:\Users\rbchs>schtasks /delete /TN Logger
WARNING: Are you sure you want to remove the task "Logger" (Y/N)? y
SUCCESS: The scheduled task "Logger" was successfully deleted.

C:\Users\rbchs>
```

4.

- Schedule a task to defragment any of your local disk daily at 10AM

```
C:\Users\rbchs>schtasks /Create /SC Daily /TN defrag /TR C:\windows\system32\defrag.exe /ST 10:00:00
SUCCESS: The scheduled task "defrag" has successfully been created.

C:\Users\rbchs>schtasks /delete /TN defrag
WARNING: Are you sure you want to remove the task "defrag" (Y/N)? y
SUCCESS: The scheduled task "defrag" was successfully deleted.

C:\Users\rbchs>
```

Attrib command

Powercfg

- Powercfg is a very powerful command for managing and tracking how your computer uses energy.
- >powercfg /energy
- > Powercfg /lastwake
- >powercfg /hibernate on
- > powercfg /hibernate off
- > powercfg /a
- powercfg /devicequery s1_supported

```
C:\Windows\system32>powercfg /energy
Enabling tracing for 60 seconds...
Observing system behavior...
Analyzing trace data...
Analysis complete.

Energy efficiency problems were found.

15 Errors
4 Warnings
64 Informational

See C:\Windows\system32\energy-report.html for more details.
```

```
C:\Users\rbchs>powercfg /lastwake
Wake History Count - 0
```

```
C:\Windows\system32>powercfg /hibernate on

C:\Windows\system32>powercfg /hibernate off

C:\Windows\system32>powercfg /a
The following sleep states are available on this system:
    Standby (S0 Low Power Idle) Network Connected

The following sleep states are not available on this system:
    Standby (S1)
        The system firmware does not support this standby state.
        This standby state is disabled when S0 low power idle is supported.

    Standby (S2)
        The system firmware does not support this standby state.
        This standby state is disabled when S0 low power idle is supported.

    Standby (S3)
        This standby state is disabled when S0 low power idle is supported.

    Hibernation
        Hibernation has not been enabled.

    Hybrid Sleep
        Standby (S3) is not available.
        Hibernation is not available.

    Fast Startup
        Hibernation is not available.
```

```
C:\Windows\system32>powercfg /devicequery s1_supported
Microsoft Print to PDF
Root Print Queue
Volume Manager
WAN Miniport (PPPOE)
Microsoft Basic Display Driver
HID Keyboard Device
HID-compliant consumer control device
USB Composite Device (002)
Microsoft Wi-Fi Direct Virtual Adapter
Microsoft Wi-Fi Direct Virtual Adapter #2
VMware Virtual Ethernet Adapter for VMnet1
VMware Virtual Ethernet Adapter for VMnet8
WAN Miniport (PPTP)
OneNote (Desktop)
Microsoft Hyper-V Virtualization Infrastructure Driver
Intel(R) Graphics Command Center
WAN Miniport (IKEv2)
Composite Bus Enumerator
```