

Lab 4 – Job Automation

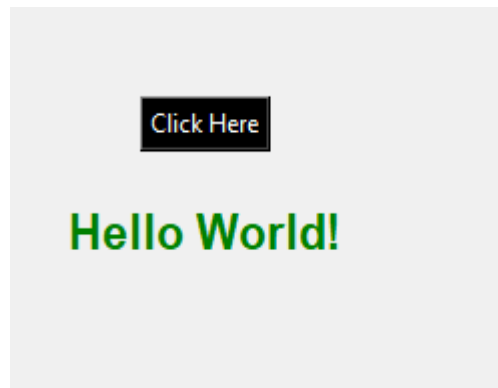
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Course :- Secure Coding

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- **Write a python script to print hello world.**



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

```
C:\Users\chait>pip install pyinstaller
Collecting pyinstaller
  Using cached pyinstaller-4.2-py3-none-any.whl
Collecting pefile>=2017.8.1
  Using cached pefile-2019.4.18.tar.gz (62 kB)
Collecting pywin32-ctypes>=0.2.0
  Using cached pywin32_ctypes-0.2.0-py2.py3-none-any.whl (28 kB)
Collecting pyinstaller-hooks-contrib>=2020.6
  Using cached pyinstaller_hooks_contrib-2020.11-py2.py3-none-any.whl (172 kB)
Collecting altgraph
  Using cached altgraph-0.17-py2.py3-none-any.whl (21 kB)
Requirement already satisfied: setuptools in c:\python\lib\site-packages (from pyinstaller) (49.2.1)
Collecting future
  Using cached future-0.18.2.tar.gz (829 kB)
Using legacy 'setup.py install' for pefile, since package 'wheel' is not installed.
Using legacy 'setup.py install' for future, since package 'wheel' is not installed.
Installing collected packages: future, pywin32-ctypes, pyinstaller-hooks-contrib, pefile, altgraph, pyinstaller
  Running setup.py install for future ... done
  Running setup.py install for pefile ... done
Successfully installed altgraph-0.17 future-0.18.2 pefile-2019.4.18 pyinstaller-4.2 pyinstaller-hooks-contrib-2020.11 pywin32-ctypes-0.2.0
```

```

C:\Users\chait>pyinstaller C:\Users\chait\OneDrive\Desktop\Hello_World.py
376 INFO: PyInstaller: 4.2
376 INFO: Python: 3.9.1
378 INFO: Platform: Windows-10-10.0.18362-SP0
381 INFO: wrote C:\Users\chait\Hello_World.spec
390 INFO: UPX is not available.
416 INFO: Extending PYTHONPATH with paths
['C:\\Users\\chait\\OneDrive\\Desktop', 'C:\\Users\\chait']
449 INFO: checking Analysis
449 INFO: Building Analysis because Analysis-00.toc is non existent
450 INFO: Initializing module dependency graph...
456 INFO: Caching module graph hooks...
469 WARNING: Several hooks defined for module 'win32ctypes.core'. Please take c
506 INFO: Analyzing base_library.zip ...
9020 INFO: Processing pre-find module path hook distutils from 'c:\\python\\lib
9022 INFO: distutils: retargeting to non-venv dir 'c:\\python\\lib'
21154 INFO: Caching module dependency graph...
21360 INFO: running Analysis Analysis-00.toc
21397 INFO: Adding Microsoft.Windows.Common-Controls to dependent assemblies of
required by c:\\python\\python.exe
21527 WARNING: lib not found: api-ms-win-core-path-l1-1-0.dll dependency of c:\\
21576 INFO: Analyzing C:\Users\chait\OneDrive\Desktop\Hello_World.py

```

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

```

C:\Users\chait>schtasks /create /sc monthly /mo first /d mon /tn "Python execution" /tr C:\Users\chait\build\Hello_World\Hello_World.exe
SUCCESS: The scheduled task "Python execution" has successfully been created.
C:\Users\chait>

```

- ***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\chait>schtasks /create /sc minute /mo 5 /tn "Executer" /tr calc.exe /st 12:00
SUCCESS: The scheduled task "Executer" has successfully been created.

```

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

```
C:\Users\chait>schtasks /create /sc daily /tn "Executer2" /tr notepad.exe /st 17:00 /et 17:40 /k
SUCCESS: The scheduled task "Executer2" has successfully been created.
```

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

```
C:\Users\chait>schtasks /create /tn "execution3" /tr "defrag.exe C:" /sc daily /st 10:00
SUCCESS: The scheduled task "execution3" has successfully been created.

C:\Users\chait>
```

- **Write a script to perform the following jobs:**

To lock your windows PC (Windows+L):

```
import ctypes
ctypes.windll.user32.LockWorkStation()
```

To clear your Recycle Bin:

```
import winshell
winshell.recycle_bin().empty(confirm=False, show_progress=False,
sound=False)
```

- **Attrib**

```
C:\Users\chait>Attrib
A          C:\Users\chait\Hello_World.spec
A          C:\Users\chait\netdata.txt
A H I      C:\Users\chait\NTUSER.DAT
A SH       C:\Users\chait\ntuser.dat.LOG1
A SH       C:\Users\chait\ntuser.dat.LOG2
A SH       C:\Users\chait\NTUSER.DAT{146871dc-aa13-11e9-a1f0-993dfc4a2ea8}.TM.blf
A SH       C:\Users\chait\NTUSER.DAT{146871dc-aa13-11e9-a1f0-993dfc4a2ea8}.TMContainer000000000000000001.regtrans-ms
A SH       C:\Users\chait\NTUSER.DAT{146871dc-aa13-11e9-a1f0-993dfc4a2ea8}.TMContainer000000000000000002.regtrans-ms
A SH       C:\Users\chait\ntuser.ini
A          C:\Users\chait\types.txt
```

- **Powercfg**

```
C:\Users\chait>powercfg /energy
Enabling tracing for 60 seconds...
Observing system behavior...

C:\Users\chait>Powercfg /lastwake
Wake History Count - 1
Wake History [0]
Wake Source Count - 1
Wake Source [0]
Type: Fixed Feature
Power Button

C:\Users\chait>powercfg /a
The following sleep states are available on this system:
Standby (S3)
Hibernate
Hybrid Sleep
Fast Startup

The following sleep states are not available on this system:
Standby (S1)
    The system firmware does not support this standby state.

Standby (S2)
    The system firmware does not support this standby state.

Standby (S0 Low Power Idle)
    The system firmware does not support this standby state.
```