

Secure Coding Lab-4

AKASH P
18BCN7078
L39+L40

- Write a python script to print hello world.

Python script :

```
print('hello world 18BCN7078')
```

```
C:\Users\AKASH\Desktop>python 18BCN7078.py  
Hello World Aks7078  
  
C:\Users\AKASH\Desktop>
```

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

```
G:\Secure Coding LABS\lab4>pyinstaller -F 18BCN7078.py  
401 INFO: PyInstaller: 4.2  
401 INFO: Python: 3.9.0  
417 INFO: Platform: Windows-10-10.0.19041-SP0  
417 INFO: wrote G:\Secure Coding LABS\lab4\18BCN7081.spec  
417 INFO: UPX is not available.  
432 INFO: Extending PYTHONPATH with paths  
['G:\\Secure Coding LABS\\lab4', 'G:\\Secure Coding  
LABS\\lab4'] 517 INFO: checking Analysis  
517 INFO: Building Analysis because Analysis-00.toc is non  
existent  
517 INFO: Initializing module dependency graph...  
533 INFO: Caching module graph hooks...  
533 WARNING: Several hooks defined for module  
'win32ctypes.core'. Please take care they do not  
conflict. 571 INFO: Analyzing base_library.zip...
```

7244 INFO: Processing pre-find module path hook distutils from
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks\\pre_find_module_path\\hook-distutils.py'.
7245 INFO: distutils: retargeting to non-venv dir
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib'
13460 INFO: Caching module dependency graph...
13590 INFO: running Analysis Analysis-00.toc
13597 INFO: Adding Microsoft.Windows.Common-Controls to
dependent assemblies of final executable
 required by
c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\python.exe
13742 WARNING: lib not found: api-ms-win-core-path-l1-1-0.dll
dependency of
c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\python39.dll
13785 INFO: Analyzing G:\\Secure Coding LABS\\lab4\\18BCN7078.py
13808 INFO: Processing module hooks...
13809 INFO: Loading module hook 'hook-difflib.py' from
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks'...
13811 INFO: Excluding import of doctest from module difflib
13812 INFO: Loading module hook 'hook-distutils.py' from
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks'...
13815 INFO: Loading module hook 'hook-distutils.util.py' from
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks'...
13818 INFO: Excluding import of lib2to3.refactor from module
distutils.util
13819 INFO: Loading module hook 'hook-encodings.py' from
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks'...
13929 INFO: Loading module hook 'hook-heapq.py' from
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks'...
13933 INFO: Excluding import of doctest from module heapq 13933
INFO: Loading module hook 'hook-lib2to3.py' from

```
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks'...
13994 INFO: Loading module hook 'hook-multiprocessing.util.py'
from
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks'...
13997 INFO: Excluding import of test.support from module
multiprocessing.util
13998 INFO: Excluding import of test from module
multiprocessing.util
14000 INFO: Loading module hook 'hook-pickle.py' from
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks'...
14002 INFO: Excluding import of argparse from module pickle
14002 INFO: Loading module hook 'hook-sysconfig.py' from
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks'...
14066 INFO: Loading module hook 'hook-xml.etree.cElementTree.py'
from
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks'...
14069 INFO: Loading module hook 'hook-xml.py' from
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks'...
14290 INFO: Loading module hook 'hook-_tkinter.py' from
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
\\lib\\site-packages\\PyInstaller\\hooks'...
14562 INFO: checking Tree
14562 INFO: Building Tree because Tree-00.toc is non existent
14564 INFO: Building Tree Tree-00.toc
14658 INFO: checking Tree
14659 INFO: Building Tree because Tree-01.toc is non existent
14662 INFO: Building Tree Tree-01.toc
14775 INFO: checking Tree
14775 INFO: Building Tree because Tree-02.toc is non existent
14779 INFO: Building Tree Tree-02.toc
14816 INFO: Looking for ctypes DLLs
14849 INFO: Analyzing run-time hooks ...
14852 INFO: Including run-time hook
'c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\
```

```
\lib\\site-packages\\PyInstaller\\hooks\\rthooks\\pyi_rth_multiprocessing.py'
14876 INFO: Looking for dynamic libraries
15221 INFO: Looking for eggs
15221 INFO: Using Python library
c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\python39.dll
15224 INFO: Found binding redirects:
[]
15229 INFO: Warnings written to G:\\Secure Coding LABS\\lab4\\build\\18BCN7081\\warn-18BCN7081.txt
15299 INFO: Graph cross-reference written to G:\\Secure Coding LABS\\lab4\\build\\18BCN7078\\xref-18BCN7081.html
15359 INFO: checking PYZ
15359 INFO: Building PYZ because PYZ-00.toc is non existent
15361 INFO: Building PYZ (ZlibArchive) G:\\Secure Coding LABS\\lab4\\build\\18BCN7078\\PYZ-00.pyz
15898 INFO: Building PYZ (ZlibArchive) G:\\Secure Coding LABS\\lab4\\build\\18BCN7078\\PYZ-00.pyz completed successfully.
15930 INFO: checking PKG
15930 INFO: Building PKG because PKG-00.toc is non existent
15931 INFO: Building PKG (CArchive) PKG-00.pkg
18229 INFO: Building PKG (CArchive) PKG-00.pkg completed successfully.
18232 INFO: Bootloader
c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\lib\\site-packages\\PyInstaller\\bootloader\\Windows-64bit\\run.exe 18233
INFO: checking EXE
18235 INFO: Building EXE because EXE-00.toc is non existent
18235 INFO: Building EXE from EXE-00.toc
18368 INFO: Copying icons from
['c:\\users\\akash\\appdata\\local\\programs\\python\\python39\\lib\\site-packages\\PyInstaller\\bootloader\\images\\icon-console.ico']
18442 INFO: Writing RT_GROUP_ICON 0 resource with 104 bytes
18443 INFO: Writing RT_ICON 1 resource with 3752 bytes
18445 INFO: Writing RT_ICON 2 resource with 2216 bytes
18447 INFO: Writing RT_ICON 3 resource with 1384 bytes
18447 INFO: Writing RT_ICON 4 resource with 37019 bytes
18448 INFO: Writing RT_ICON 5 resource with 9640 bytes
```

```
18449 INFO: Writing RT_ICON 6 resource with 4264 bytes
18449 INFO: Writing RT_ICON 7 resource with 1128 bytes
18463 INFO: Updating manifest in G:\Secure Coding
LABS\lab4\build\18BCN7078\run.exe.rawka8ta
18528 INFO: Updating resource type 24 name 1 language 0
18533 INFO: Appending archive to EXE G:\Secure Coding
LABS\lab4\dist\18BCN7078.exe
18633 INFO: Building EXE from EXE-00.toc completed successfully.
```

```
G:\Secure Coding LABS\lab4>pyinstaller -F 18BCN7081.py
401 INFO: PyInstaller: 4.2
401 INFO: Python: 3.9.0
417 INFO: Platform: Windows-10-10.0.19041-SP0
417 INFO: wrote G:\Secure Coding LABS\lab4\18BCN7081.spec
417 INFO: UPX is not available.
432 INFO: Extending PYTHONPATH with paths
['G:\\Secure Coding LABS\\lab4', 'G:\\Secure Coding LABS\\lab4']
517 INFO: checking Analysis
```

```
16652 INFO: Updating manifest in G:\Secure Coding LABS\lab4\build\18BCN7081\run.exe.ss
16907 INFO: Updating resource type 24 name 1 language 0
16922 INFO: Appending archive to EXE G:\Secure Coding LABS\lab4\dist\18BCN7081.exe
18041 INFO: Building EXE from EXE-00.toc completed successfully.
```

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

```
G:\Secure Coding LABS\lab4>schtasks /create /sc monthly /mo first
/d mon /tn "Python Execution" /tr "18BCN7078.exe" SUCCESS: The
scheduled task "Python Execution" has successfully been created.
```

```
C:\Users\AKASH\Desktop>schtasks /create /sc monthly /mo first /d mon /tn "python Execution" /
tr "18BCN7078.exe"
SUCCESS: The scheduled task "python Execution" has successfully been created.

C:\Users\AKASH\Desktop>
```

Intermediate

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

```
C:\Windows\system32>schtasks /create /sc minute /mo 5 /tn  
"Executor" /tr "Calculator.exe" /st 17:30  
SUCCESS: The scheduled task "Executor" has successfully been  
created.
```

```
C:\Users\AKASH\Desktop>schtasks /create /sc minute /mo 5 /tn "Executor" /tr "Calculator.exe"  
/st 17:30  
SUCCESS: The scheduled task "Executor" has successfully been created.  
C:\Users\AKASH\Desktop>
```

- Schedule a task named "Executor2" to run notepad starting at 5:00PM and automatically terminating at 5:40PM hours every day

```
C:\Windows\system32>schtasks /create /sc daily /tn "Executor2"  
/tr "notepad.exe" /st 17:00 /et 17:40  
SUCCESS: The scheduled task "Executor2" has successfully been  
created.
```

```
C:\Users\AKASH\Desktop>schtasks /create /sc daily /tn "Executor2" /tr "notepad.exe" /st 17:00  
/et 17:40  
SUCCESS: The scheduled task "Executor2" has successfully been created.  
C:\Users\AKASH\Desktop>
```

Advanced

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

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

```
C:\Windows\system32>schtasks /create /sc daily /tn "Defragment  
E Daily 18BCN7078" /tr "defrag.exe E:"  
SUCCESS: The scheduled task "Defragment E Daily 18BCN7078" has  
successfully been created.
```

```
C:\Users\AKASH\Desktop>schtasks /create /sc daily /tn "Defragment E Daily 18BCN7081" /tr "def  
rag.exe E:"  
SUCCESS: The scheduled task "Defragment E Daily 18BCN7081" has successfully been created.  
C:\Users\AKASH\Desktop>
```

Attrib Commands

+r = This assigns the read-only file attribute to the file or directory. -r = This removes the read-only attribute.
+s = This assigns the system file attribute to the file or directory. -s = This removes the system attribute.
+h = This assigns the hidden file attribute to the file or directory. -h = This removes the hidden attribute.

+c = This assigns the compressed file attribute to the file or directory. -c = This removes the compressed attribute.

```
C:\Users\AKASH\Desktop>attrib
A          C:\Users\AKASH\Desktop\18BCN7078.py
A          C:\Users\AKASH\Desktop\Billing.class
A  SH      C:\Users\AKASH\Desktop\desktop.ini
A          C:\Users\AKASH\Desktop\Leoxsys Wireless Adapter.lnk
A          C:\Users\AKASH\Desktop\TeamLink.lnk
C:\Users\AKASH\Desktop>
```

CMD Script:

```
rundll32.exe user32.dll, LockWorkStation
```

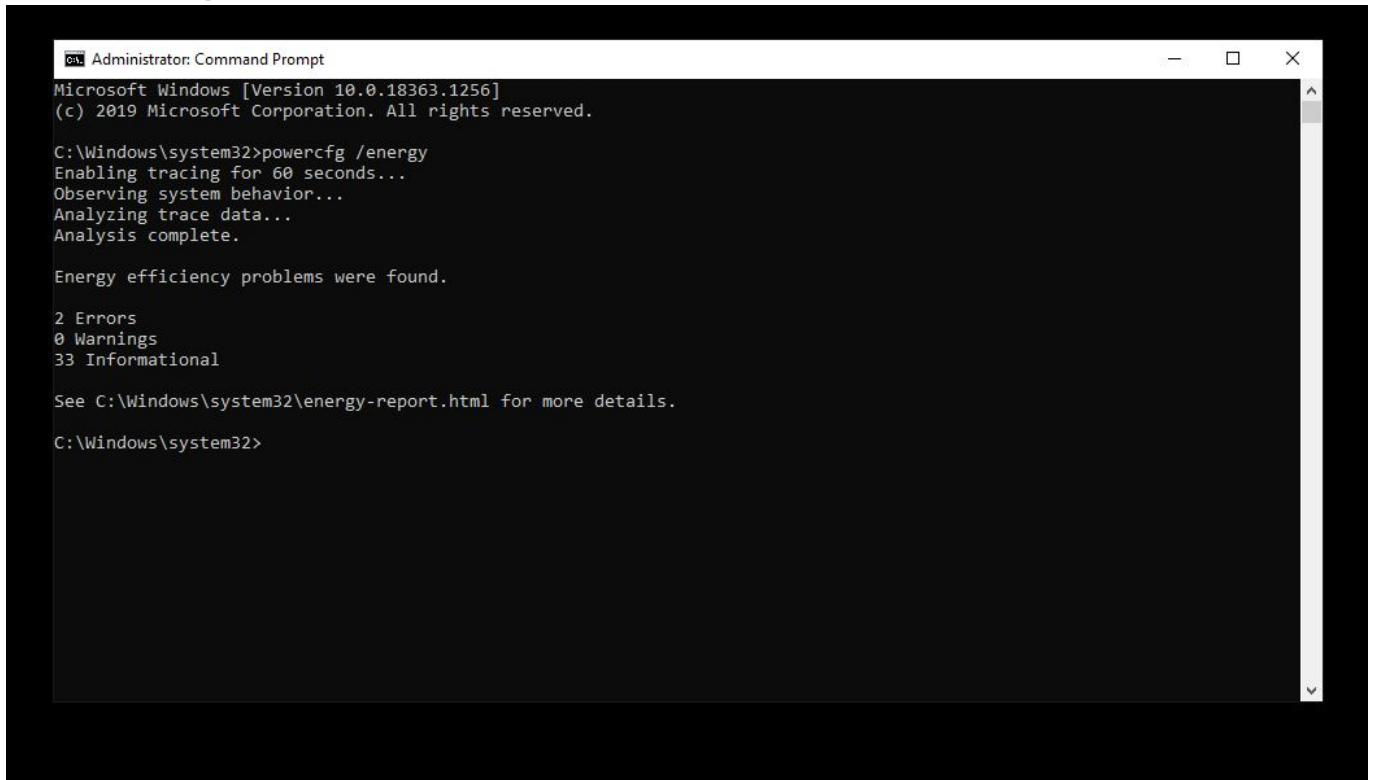
```
C:\Users\AKASH\Desktop>rundll32.exe user32.dll, LockWorkStation
C:\Users\AKASH\Desktop>
```

CMD Script:

```
rmdir /s %systemdrive%\$Recycle.bin
```

```
C:\Users\AKASH\Desktop>rmdir /s %systemdrive%\$Recycle.bin
C:\$Recycle.bin, Are you sure (Y/N)? N
C:\Users\AKASH\Desktop>
```


Powercfg



```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.18363.1256]
(c) 2019 Microsoft Corporation. All rights reserved.

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

Energy efficiency problems were found.

2 Errors
0 Warnings
33 Informational

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

C:\Windows\system32>
```

Powercfg is a very powerful command for managing and tracking how your computer uses energy