

# Secure Coding Lab – 4

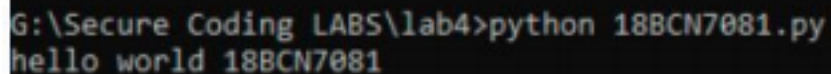
S.V. SAIVAMSI,19BCN7258

## Mid-Level

- Write a python programme to print Hello World.

Python script:

```
print ('hello world 19BCN7258')
```



```
G:\Secure Coding LABS\lab4>python 18BCN7081.py  
hello world 18BCN7081
```

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

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```
G:\Secure Coding LABS\lab4>pyinstaller -F 19BCN7258.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\19BCN7258.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\\SAIVAMSI\\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\\SAIVAMSI\\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\\SAIVAMSI\\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\\SAIVAMSI\\appdata\\local\\programs\\python\\python39\\python39.dll

13785 INFO: Analyzing G:\\Secure Coding LABS\\lab4\\19BCN7258.py 13808  
INFO: Processing module hooks...

13809 INFO: Loading module hook 'hook-difflib.py' from  
'c:\\users\\SAIVAMSI\\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\\SAIVAMSI\\appdata\\local\\programs\\python\\python39\\lib\\site-packages\\PyInstaller\\hooks'...

13815 INFO: Loading module hook 'hook-distutils.util.py' from  
'c:\\users\\SAIVAMSI\\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\\SAIVAMSI\\appdata\\local\\programs\\python\\python39\\lib\\site-packages\\PyInstaller\\hooks'...

13929 INFO: Loading module hook 'hook-heapq.py' from  
'c:\\users\\SAIVAMSI\\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\\SAIVAMSI\\appdata\\local\\programs\\python\\python39\\lib\\site-packages\\PyInstaller\\hooks'...

13994 INFO: Loading module hook 'hook-multiprocessing.util.py' from  
'c:\\users\\SAIVAMSI\\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\\SAIVAMSI\\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\\SAIVAMSI\\appdata\\local\\programs\\python\\python39\\lib\\site-packages\\PyInstaller\\hooks'...

14066 INFO: Loading module hook 'hook-xml.etree.cElementTree.py' from 'c:\\users\\SAIVAMSI\\appdata\\local\\programs\\python\\python39\\lib\\site-packages\\PyInstaller\\hooks'...

14069 INFO: Loading module hook 'hook-xml.py' from 'c:\\users\\SAIVAMSI\\appdata\\local\\programs\\python\\python39\\lib\\site-packages\\PyInstaller\\hooks'...

14290 INFO: Loading module hook 'hook-\_tkinter.py' from 'c:\\users\\SAIVAMSI\\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\\SAIVAMSI\\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\SAIVAMSI\appdata\local\programs\python\python39\python39 .dll  
15224 INFO: Found binding redirects:  
[]  
15229 INFO: Warnings written to G:\Secure Coding  
LABS\lab4\build\19BCN7258\warn-19BCN7258.txt  
15299 INFO: Graph cross-reference written to G:\Secure Coding  
LABS\lab4\build\19BCN7258\xref-19BCN7258.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\19BCN7258\PYZ-00.pyz  
15898 INFO: Building PYZ (ZlibArchive) G:\Secure Coding  
LABS\lab4\build\19BCN7258\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\SAIVAMSI\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\\SAIVAMSI\\appdata\\local\\programs\\python\\python39  
[\\lib\\site-packages\\PyInstaller\\bootloader\\images\\icon-cons  
ole.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\19BCN7258\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\19BCN7258.exe

18633 INFO: Building EXE from EXE-00.toc completed successfully.

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```
G:\Secure Coding LABS\lab4>pyinstaller
401 INFO: PyInstaller: 4.2
401 INFO: Python: 3.9.0
417 INFO: Platform: Windows-10-10.0.19
417 INFO: wrote G:\Secure Coding LABS\
417 INFO: UPX is not available.
432 INFO: Extending PYTHONPATH with pa
['G:\Secure Coding LABS\lab4', 'G:\
517 INFO: checking Analysis
```

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```
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.
```

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Local Disk (G:) > Secure Coding LABS > lab4

Name	Date modified	Type	Size
18BCN7081.exe	27-02-2021 12:54	Application	6,689 KB
18BCN7081.py	27-02-2021 13:01	Python File	1 KB

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

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G:\Secure Coding LABS\lab4>schtasks /create /sc monthly /mo first /d  
mon /tn "Python Execution" /tr "19BCN7258.exe" SUCCESS: The scheduled  
task "Python Execution" has successfully been created.

```
G:\Secure Coding LAB5\lab4>schtasks /create /sc monthly /mo first /d mon /tn "Python Execution" /tr "18BCN7081.exe"
SUCCESS: The scheduled task "Python Execution" has successfully been created.

G:\Secure Coding LAB5\lab4>
```

## Intermediate

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- 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:\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:\Windows\system32>
```

- 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:\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:\Windows\system32>
```

## Advanced

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

```
C:\Windows\system32>schtasks /create /sc daily /tn "Defragment E Daily
18BCN7081" /tr "defrag.exe E:" SUCCESS: The scheduled task "Defragment
E Daily 19BCN7258" has successfully been created.
```

```
C:\Windows\system32>schtasks /create /sc daily /tn "Defragment E Daily 18BCN7081" /tr "defrag.exe E:"  
SUCCESS: The scheduled task "Defragment E Daily 18BCN7081" has successfully been created.  
C:\Windows\system32>
```

#### 19BCN7258 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.

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```
C:\>attrib  
A SHR          C:\bootmgr  
A SH           C:\BOOTNXT  
A SH           C:\DumpStack.log.tmp  
A SH I         C:\hiberfil.sys  
A SH           C:\pagefile.sys  
A SH           C:\swapfile.sys
```

```
E:\>attrib  
A           E:\18BCN7081.exe  
A           E:\18BCN7081.pdf  
A           E:\18BCN7081.txt
```

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```
E:\>attrib +r +h 18BCN7081.exe  
E:\>attrib +s 18BCN7081.pdf
```

```
E:\>attrib  
A      HR      E:\18BCN7081.exe  
A      S      E:\18BCN7081.pdf  
A
```

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```
E:\>attrib -r -h 18BCN7081.exe  
E:\>attrib -s 18BCN7081.pdf  
E:\>attrib  
A      E:\18BCN7081.exe  
A      E:\18BCN7081.pdf  
A      E:\18BCN7081.txt
```

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## Write a script to perform the following jobs

- To lock your PC(Win + L)

**CMD Script:**

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

**CMD Script:**

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

**Powercfg**



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

Examines the system for common energy-efficiency and battery life problems.

shows the information about what woke the system from the last sleep transition.

Will turn hibernate feature on and off.

shows the sleep states in available system

To list the devices that supports waking PC from S1 state