

18BCE7036

Khushal khare

Lab-4

1. Python script:- Contains a button,it shows hello world when the button is clicked.

```
import tkinter as tk
root= tk.Tk()
canvas1 = tk.Canvas (root, width = 300, height = 300)
canvas1.pack()
def hello ():
    labell = tk.Label (root, text= 'Hello World!', fg='green',
font=('helvetica', 12, 'bold'))
    canvas1.create_window(150, 200, window=labell)

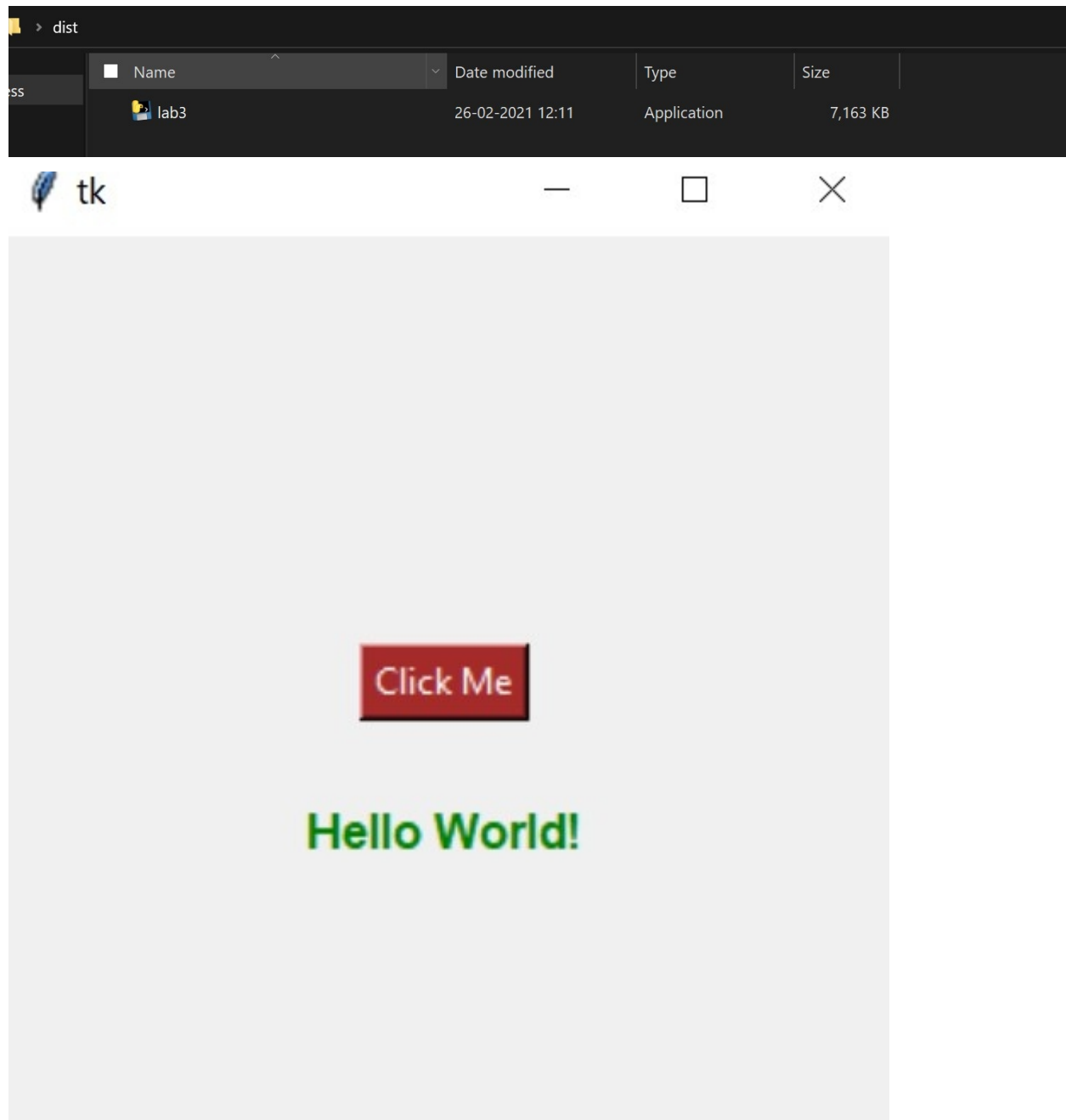
button1 = tk.Button (text='Click Me', command=hello,
bg='brown', fg='white')
canvas1.create_window(150, 150, window=button1)

root.mainloop()
```

Converting python file to executable

```
C:\Users\lekha\GinJupalli\Desktop\pyinstaller --onefile lab3.py
211 INFO: PyInstaller: 4.2
211 INFO: Python: 3.7.1
213 INFO: Platform: windows-10-10.0.18362-SP0
214 INFO: wrote C:\Users\lekha\GinJupalli\Desktop\lab3.spec
221 INFO: UPX is not available.
234 INFO: Extending PYTHONPATH with paths
['C:\Users\lekha\GinJupalli\Desktop',
 'C:\Users\lekha\GinJupalli\Desktop']
339 INFO: checking Analysis
340 INFO: Building Analysis because Analysis-00.toc is non existent
340 INFO: Initializing module dependency graph...
344 INFO: Caching module graph hooks...
372 WARNING: Several hooks defined for module 'win32types.core'. Please take care they do not conflict.
412 INFO: Analyzing base_library.zip ...
8655 INFO: Caching module dependency graph...
8804 INFO: running Analysis Analysis-00.toc
8812 INFO: Adding Microsoft.Windows.Common-Controls to dependent assemblies of final executable
Required by C:\Users\lekha\GinJupalli\AppData\Local\Programs\Python\Python37-32\python.exe
8925 INFO: Analyzing C:\Users\lekha\GinJupalli\Desktop\lab3.py
9142 INFO: Processing module hooks...
9142 INFO: Loading module hook 'hook-difflib.py' from 'C:\Users\lekha\GinJupalli\AppData\Local\Programs\Python\Pyt
hon\Python37-32\lib\site-packages\PyInstaller\hooks\standardhooks'
9147 INFO: Excluding import of doctest from module difflib
9148 INFO: Loading module hook 'hook-encodings.py' from 'C:\Users\lekha\GinJupalli\AppData\Local\Programs\Python\Pyt
hon\Python37-32\lib\site-packages\PyInstaller\hooks\standardhooks'
9409 INFO: Loading module hook 'hook-heapq.py' from 'C:\Users\lekha\GinJupalli\AppData\Local\Programs\Python\Pyt
hon\Python37-32\lib\site-packages\PyInstaller\hooks\standardhooks'
9429 INFO: Excluding import of doctest from module heapq
9429 INFO: Loading module hook 'hook-pickle.py' from 'C:\Users\lekha\GinJupalli\AppData\Local\Programs\Python\Pyt
hon\Python37-32\lib\site-packages\PyInstaller\hooks\standardhooks'
9438 INFO: Excluding import of argparse from module pickle
9439 INFO: Loading module hook 'hook-xml.py' from 'C:\Users\lekha\GinJupalli\AppData\Local\Programs\Python\Pyt
hon\Python37-32\lib\site-packages\PyInstaller\hooks\standardhooks'
10270 INFO: Loading module hook 'hook-tkinter.py' from 'C:\Users\lekha\GinJupalli\AppData\Local\Programs\Python\Pyt
hon\Python37-32\lib\site-packages\PyInstaller\hooks\standardhooks'
10876 INFO: checking Tree
10877 INFO: Building Tree because Tree-00.toc is non existent
10882 INFO: Building Tree Tree-00.toc
11727 INFO: checking Tree
11728 INFO: Building Tree because Tree-01.toc is non existent
11732 INFO: Building Tree Tree-01.toc
11983 INFO: checking Tree
11983 INFO: Building Tree because Tree-02.toc is non existent
11985 INFO: Building Tree Tree-02.toc
12037 INFO: Looking for ctypes DLLs
12037 INFO: Analyzing run-time hooks ...
12043 INFO: Including run-time hook 'C:\Users\lekha\GinJupalli\AppData\Local\Programs\Python\Python37-32\lib\site-packages\PyInstaller\hooks\standardhooks\hook-ctypes.py'
```

Executable file:-



Scheduling a task named as python execution :-

```
C:\Users\Lekhana Ginjupalli>schtasks /create /sc weekly /d mon /tn "python execution" /tr "C:\Users\Lekhana Ginjupalli\Desktop\dist" /st 13:00
SUCCESS: The scheduled task "python execution" has successfully been created.
```

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\Lekhana Ginpallli>schtasks /create /sc minute /mo 5 /tn "Executer" /tr "C:\Windows\System32\calc.exe" /ST 13:00  
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\Lekhana Ginpallli>schtasks /create /sc daily /tn "Executer2" /tr "C:\windows\SysWow64\notepad.exe" /ST 17:00 /ET 17:40  
SUCCESS: The scheduled task "Executer2" has successfully been created.
```

3. Powercfg :- also called power schemes - to use the available sleep states, to control the power states of individual devices, and to analyze the system for common energy-efficiency and battery-life problems.

Energy command:- Analyzes the system for common energy-efficiency and battery life problems.

```
C:\WINDOWS\system32>powercfg/energy  
Enabling tracing for 60 seconds...  
Observing system behavior...  
Analyzing trace data...  
Analysis complete.  
  
Energy efficiency problems were found.  
  
3 Errors  
17 Warnings  
46 Informational  
  
See C:\WINDOWS\system32\energy-report.html for more details.
```

Lastwake command:- reports the information about what woke the system from the last sleep transition.

```
C:\WINDOWS\system32>powercfg/lastwake  
Wake History Count - 1  
Wake History [0]  
Wake Source Count - 0
```

Hibernate :- enables and disables the hibernate feature.

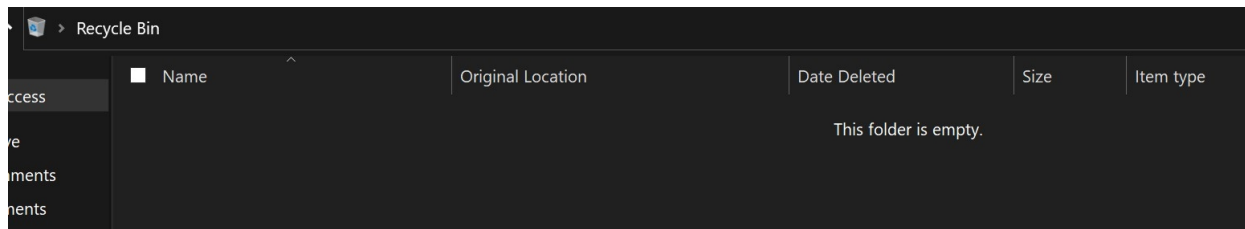
```
C:\WINDOWS\system32>powercfg/hibernate on  
C:\WINDOWS\system32>powercfg/hibernate off
```

/a :- reports the sleep states in available system

```
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)  
        The system firmware does not support this standby state.  
        This standby state is disabled when S0 low power idle is supported.  
  
    Hibernate  
        Hibernation has not been enabled.  
  
    Hybrid Sleep  
        Standby (S3) is not available.  
        Hibernation is not available.  
  
    Fast Startup  
        Hibernation is not available.
```

Emptying the recycle bin :-

```
C:\WINDOWS\system32>rd /s %systemdrive%\$Recycle.bin  
C:\$Recycle.bin, Are you sure (Y/N)? Y
```



To lock the pc, type `rundll32.exe user32.dll, LockWorkStation`. After typing this and clicking enter, pc will automatically get locked.

Defragmenting a disk:-

```
C:\WINDOWS\system32>defrag /?
Microsoft Drive Optimizer
Copyright (c) Microsoft Corp.

Description:

    Optimizes and defragments files on local volumes to
    improve system performance.

Syntax:

    defrag <volumes> | /C | /E <volumes> [<task(s)>] [/H] [/M [n] | [/U] [/V]] [/I n]

    Where <task(s)> is omitted (traditional defrag), or as follows:
        /A | [/D] [/K] [/L] | /O | /X

    Or, to track an operation already in progress on a volume:
    defrag <volume> /T

Parameters:

    Value      Description
    /A         Perform analysis on the specified volumes.
    /C         Perform the operation on all volumes.
    /D         Perform traditional defrag (this is the default). On a tiered volume
               though, traditional defrag is performed only on the Capacity tier.
    /E         Perform the operation on all volumes except those specified.
    /G         Optimize the storage tiers on the specified volumes.
    /H         Run the operation at normal priority (default is low).
    /I n       Tier optimization would run for at most n seconds on each volume.
    /K         Perform slab consolidation on the specified volumes.
    /L         Perform retrim on the specified volumes.
    /M [n]     Run the operation on each volume in parallel in the background.
               At most n threads optimize the storage tiers in parallel.
    /O         Perform the proper optimization for each media type.
    /T         Track an operation already in progress on the specified volume.
    /U         Print the progress of the operation on the screen.
    /V         Print verbose output containing the fragmentation statistics.
    /X         Perform free space consolidation on the specified volumes.

Examples:

    defrag C: /U /V
    defrag C: D: /M
    defrag C:\mountpoint /A /U
    defrag /C /H /V
```

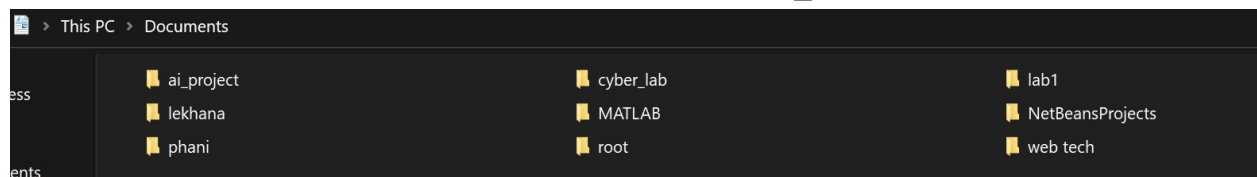
Schedule a task to defragment any of your local disk daily at 10AM

```
C:\WINDOWS\system32>schtasks /create /sc daily /tn "defrag" /tr "defrag C:" /st 10:00  
SUCCESS: The scheduled task "defrag" has successfully been created.
```

The attrib command displays or changes the file attributes for a file or folder. It's run from the Command Prompt in all versions of Windows.

Using attrib command, secure_lab folder is hided.The command used is :-

```
C:\Users\Lenovo\Documents>attrib +h +r +s /s /d secure_lab
```



To retrieve back that file,command used is :-

```
C:\Users\Lenovo\Documents>attrib -h -r -s /s /d secure_lab
```

