Ex. No.: 5 Date: 27.09.2024

PROCESS CODE INJECTION

Aim:

To do process code injection on Firefox using ptrace system call.

Algorithm:

- 1. Find out the pid of the running Firefox program.
- 2. Create the code injection file.
- 3. Get the pid of the Firefox from the command line arguments.
- 4. Allocate memory buffers for the shellcode.
- 5. Attach to the victim process with PTRACE ATTACH.
- 6. Get the register values of the attached process.
- 7. Use PTRACE POKETEXT to insert the shellcode.
- 8. Detach from the victim process using PTRACE DETACH

Output:

```
[root@localhost ~]# vi codeinjection.c

[root@localhost ~]# gcc codeinjection.c -o codeinject

[root@localhost ~]#ps -e|grep firefox

1433? 00:01:23 firefox

[root@localhost ~]# ./codeinject 1433

----Memory bytecode injector----- Writing

EIP 0x6, process 1707

[root@localhost ~]#
```

Result: Thus, the process code injection on Firefox has been successfully executed.

Department of Computer Science and Engineering (Cyber Security)/CR23331