

Applied Network Security

Bug Bounty Progress

Sheldon1

```
[root@parrot]~  
#cd Desktop/  
[root@parrot]~/Desktop  
#ls  
bigbangtheory-master      parrot-welcome.desktop  README.security  
debian-installer-launcher.desktop  PTES-master             test  
hackme (2)                README.license          vmware-tools-distrib  
[root@parrot]~/Desktop  
#cd big  
bash: cd: big: No such file or directory  
[x]-[root@parrot]~/Desktop  
#ls  
bigbangtheory-master      parrot-welcome.desktop  README.security  
debian-installer-launcher.desktop  PTES-master             test  
hackme (2)                README.license          vmware-tools-distrib  
[root@parrot]~/Desktop  
#cd bigbangtheory-master/  
[root@parrot]~/Desktop/bigbangtheory-master  
#ls  
learnord_win.exe  README.md  sheldon1  sheldon2  
[root@parrot]~/Desktop/bigbangtheory-master  
#./sheldon1  
Welcome to my fiendish little bomb. You have 6 phases with  
which to blow yourself up. Have a nice day!
```

```
File Edit View Search Terminal Help  
[root@parrot]~  
#cd Desktop/  
[root@parrot]~/Desktop  
#ls  
bigbangtheory-master      parrot-welcome.desktop  README.security  
debian-installer-launcher.desktop  PTES-master             test  
hackme (2)                README.license          vmware-tools-distrib  
[root@parrot]~/Desktop  
#cd bigbangtheory-master/  
[root@parrot]~/Desktop/bigbangtheory-master  
#gdb -q sheldon1  
Reading symbols from /root/Desktop/bigbangtheory-master/sheldon1...done.  
(gdb)  
(gdb) set disassembly-flavor intel  
(gdb) disassemble main  
Dump of assembler code for function main:  
0x080489b0 <+0>:    push    ebp  
0x080489b1 <+1>:    mov     ebp,esp  
0x080489b3 <+3>:    sub     esp,0x14  
0x080489b6 <+6>:    push    ebx  
0x080489b7 <+7>:    mov     eax,DWORD PTR [ebp+0x8]  
0x080489ba <+10>:   mov     ebx,DWORD PTR [ebp+0xc]  
0x080489bd <+13>:   cmp     eax,0x1  
0x080489c0 <+16>:   jne     0x80489d0 <main+32>
```

```

File Edit View Search Terminal Help
0x08048aa0 <+240>: push    eax
0x08048aa1 <+241>: call   0x8048b98 <phase_3>
0x08048aa6 <+246>: call   0x804952c <phase_defused>
0x08048aab <+251>: add     esp,0xffffffff4
0x08048aae <+254>: push    0x804973f
0x08048ab3 <+259>: call   0x8048810 <printf@plt>
0x08048ab8 <+264>: add     esp,0x20
0x08048abb <+267>: call   0x80491fc <read_line>
0x08048ac0 <+272>: add     esp,0xffffffff4
0x08048ac3 <+275>: push    eax
0x08048ac4 <+276>: call   0x8048ce0 <phase_4>
0x08048ac9 <+281>: call   0x804952c <phase_defused>
0x08048ace <+286>: add     esp,0xffffffff4
0x08048ad1 <+289>: push    0x8049760
0x08048ad6 <+294>: call   0x8048810 <printf@plt>
0x08048adb <+299>: add     esp,0x20
0x08048ade <+302>: call   0x80491fc <read_line>
0x08048ae3 <+307>: add     esp,0xffffffff4
0x08048ae6 <+310>: push    eax
0x08048ae7 <+311>: call   0x8048d2c <phase_5>
0x08048aec <+316>: call   0x804952c <phase_defused>
---Type <return> to continue, or q <return> to quit---
0x08048af1 <+321>: add     esp,0xffffffff4
0x08048af4 <+324>: push    0x80497a0

File Edit View Search Terminal Help
---Type <return> to continue, or q <return> to quit---
0x08048af1 <+321>: add     esp,0xffffffff4
0x08048af4 <+324>: push    0x80497a0
0x08048af9 <+329>: call   0x8048810 <printf@plt>
0x08048afe <+334>: add     esp,0x20
0x08048b01 <+337>: call   0x80491fc <read_line>
0x08048b06 <+342>: add     esp,0xffffffff4
0x08048b09 <+345>: push    eax
0x08048b0a <+346>: call   0x8048d98 <phase_6>
0x08048b0f <+351>: call   0x804952c <phase_defused>
0x08048b14 <+356>: xor     eax,eax
0x08048b16 <+358>: mov     ebx,DWORD PTR [ebp-0x18]
0x08048b19 <+361>: mov     esp,ebp
0x08048b1b <+363>: pop     ebp
0x08048b1c <+364>: ret
End of assembler dump.
(gdb) x/25c 0x80497c0
0x80497c0:  80 'P' 117 'u' 98 'b' 108 'l' 105 'i' 99 'c' 32 ' ' 115 's'
0x80497c8:  112 'p' 101 'e' 97 'a' 107 'k' 105 'i' 110 'n' 103 'g' 32 ' '
0x80497d0:  105 'i' 115 's' 32 ' ' 118 'v' 101 'e' 114 'r' 121 'y' 32 ' '
0x80497d8:  101 'e'
(gdb) break main
Breakpoint 1 at 0x80489b7: file bomb.c, line 36.
(gdb)

```

```

root@kali: ~/Downloads/
Actions Edit View Help
kali: ~/...theory-master ✕
kali:~/Downloads/bigbangtheory-master# ./sheldon
Welcome to my fiendish little bomb. You have 6
seconds to blow yourself up. Have a nice day!
Defusing is very easy.
1 defused. How about the next one?

```

```

root@kali:~/Downloads/bigbangtheory-master# ./sheldon
bash: ./sheldon: Permission denied
root@kali:~/Downloads/bigbangtheory-master# chmod 755 sheldon
root@kali:~/Downloads/bigbangtheory-master# ./sheldon
Welcome to my fiendish little bomb. You have 6 pl
seconds to blow yourself up. Have a nice day!

gdb

BOOM!!!
The bomb has blown up.

```

```

root@kali:~/Downloads/bigbangtheory-master
File Actions Edit View Help
root@kali: ~/...theory-master ✕
root@kali:~/Downloads/bigbangtheory-master# gdb -q sheldon
Reading symbols from sheldon...
Gdb> run
22      bomb.c: No such file or directory.
Gdb> disassemble phase_1
Dump of assembler code for function phase_1:
0x0000000000401000: push    %rbp
0x0000000000401001: mov     %rsp,%rbp
0x0000000000401002: sub     $0x10,%rsp
0x0000000000401003: mov     $0x0,%eax
0x0000000000401004: call    0x0000000000401000
0x0000000000401005: add     $0x1,%eax
0x0000000000401006: push    %rax
0x0000000000401007: call    0x0000000000401000
0x0000000000401008: add     $0x1,%eax
0x0000000000401009: call    0x0000000000401000
0x000000000040100a: test    %eax,%eax
0x000000000040100b: jnz     0x0000000000401000

```

```
root@kali: ~/Dow
File Actions Edit View Help
root@kali: ~/...theory-master x
(gdb) x/25c 0x80497c0
0x80497c0:      80 'P'    117 'u'   98 'b'    10
0x80497c8:      112 'p'    101 'e'   97 'a'    10
0x80497d0:      105 'i'    115 's'   32 ' '    11
0x80497d8:      101 'e'
```

Task-2

Sheldon-2


```

[~]root@parrot[~]-[~/Desktop]
[~]root@parrot[~]-[~/Desktop/bigbangtheory-master/]
[~]root@parrot[~]-[~/Desktop/bigbangtheory-master/]
[~]root@parrot[~]-[~/Desktop/bigbangtheory-master/]
[~]root@parrot[~]-[~/Desktop/bigbangtheory-master/]
GNU gdb (GDB) 7.4.1-debian
Copyright (C) 2012 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law. Type "show copying"
and "show warranty" for details.
This GDB was configured as "x86_64-linux-gnu".
For bug reporting instructions, please see:
<http://www.gnu.org/software/gdb/bugs/>...
Reading symbols from /root/Desktop/bigbangtheory-master/sheldon2...done.
(gdb)
(gdb) set disassembly-flavor intel
(gdb) disassemble main
Dump of assembler code for function main:
   0x080494ca <+0>:    lea     ecx,[esp+0x4]
   0x080494ce <+4>:    and     esp,0xffffffff
   0x080494d1 <+7>:    push   DWORD PTR [ecx-0x4]
   0x080494d4 <+10>:   push   ebp
   0x08049670 <+422>:   lea     eax,[ebp-0x1c]
   0x08049673 <+425>:   mov     DWORD PTR [esp],eax
   0x08049676 <+428>:   call   0x8048764 <strcasecmp@plt>
   0x0804967b <+433>:   test    eax,eax
   0x0804967d <+435>:   jne     0x804968d <main+451>
   0x0804967f <+437>:   mov     DWORD PTR [esp],0xa
   0x08049686 <+444>:   call   0x8048754 <raise@plt>
   0x0804968b <+449>:   jmp     0x80496ab <main+481>
   0x0804968d <+451>:   movzx   eax,BYTE PTR [ebp-0x1c]
   0x08049691 <+455>:   cmp     al,0xa
   0x08049693 <+457>:   jne     0x80496a1 <main+471>
   0x08049695 <+459>:   mov     DWORD PTR [ebp-0x24],0x0
---Type <return> to continue, or q <return> to quit---
Quit
(gdb) x/4 0x0804961c
0x0804961c <main+338>:   69485767      134521207      -1981528691      9044060
0
(gdb) break point
Function "point" not defined.
Make breakpoint pending on future shared library load? (y or [n]) y

Breakpoint 1 (point) pending.
(gdb)
Function "point" not defined.

```