

Amrita School of Engineering Chennai – 601 103, Tamil Nadu, India.

## AMRITA SCHOOL OF ENGINEERING

Degree of Bachelor of Technology in **COMPUTER SCIENCE & ENGINEERING** 

# COGNIZANCE TASK-2 [LINUX GAMES]

**Submitted by:** 

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## LEYEL O:-

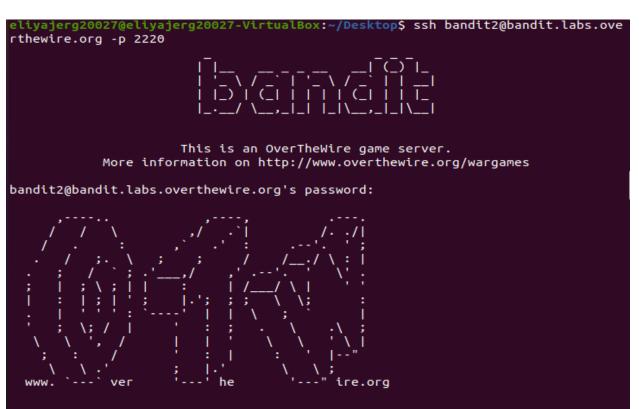
```
Welcome to OverTheWire!
If you find any problems, please report them to the #wargames channel on
discord or IRC.
 --[ Playing the games ]--
   This machine might hold several wargames.
   If you are playing "somegame", then:
     * USERNAMES are somegame0, somegame1,
* Most LEVELS are stored in /somegame/
       PASSWORDS for each level are stored in /etc/somegame_pass/.
  Write-access to homedirectories is disabled. It is advised to create a working directory with a hard-to-guess name in /tmp/. You can use the command "mktemp -d" in order to generate a random and hard to guess directory in /tmp/. Read-access to both /tmp/ is disabled and to /proc restricted so that users cannot snoop on eachother. Files and directories with easily guessable or short names will be periodically deleted! The /tmp
   directory is regularly wiped.
   Please play nice:
     * don't leave orphan processes running
* don't leave exploit-files laying around
     * don't annoy other players
     * don't post passwords or spoilers
   In addition, the execstack tool can be used to flag the stack as
   executable on ELF binaries.
   Finally, network-access is limited for most levels by a local
   firewall.
--[ Tools ]--
 For your convenience we have installed a few useful tools which you can find
 in the following locations:
      * gef (https://github.com/hugsy/gef) in /opt/gef/
     * pwndbg (https://github.com/pwndbg/pwndbg) in /opt/pwndbg/
      * peda (https://github.com/longld/peda.git) in /opt/peda/
      * gdbinit (https://github.com/gdbinit/Gdbinit) in /opt/gdbinit/
      * pwntools (https://github.com/Gallopsled/pwntools)
      * radare2 (http://www.radare.org/)
 Both python2 and python3 are installed.
--[ More information ]--
   For more information regarding individual wargames, visit
   http://www.overthewire.org/wargames/
   For support, questions or comments, contact us on discord or IRC.
   Enjoy your stay!
```

```
bandit0@bandit:~$ ls -alps
total 24
4 drwxr-xr-x 2 root
                     root
                              4096 Sep 1 06:30 ./
4 drwxr-xr-x 49 root
                     root
                              4096 Sep 1 06:30 ../
            1 root
4 -rw-r--r--
                     root
                              220 Jan 6 2022 .bash_logout
4 -rw-r--r-- 1 root
                    root
                              3771 Jan 6 2022 .bashrc
                             807 Jan 6 2022 .profile
4 -rw-r--r-- 1 root
                     root
4 -rw-r---- 1 bandit1 bandit0 33 Sep 1 06:30 readme
bandit0@bandit:~$ cat readme
NH2SXQwcBdpmTEzi3bvBHMM9H66vVXjL
bandit0@bandit:~$ exit
logout
Connection to bandit.labs.overthewire.org closed.
```

#### LEVE1:

```
Both python2 and python3 are installed.
--[ More information ]--
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 http://www.overthewire.org/wargames/
  For support, questions or comments, contact us on discord or IRC.
  Enjoy your stay!
bandit1@bandit:~$ ls -alps
total 24
4 -rw-r---- 1 bandit2 bandit1
                                 33 Sep 1 06:30 -
4 drwxr-xr-x 2 root
                       root
                               4096 Sep 1 06:30 ./
                               4096 Sep 1 06:30 ../
4 drwxr-xr-x 49 root
                       root
4 -rw-r--r-- 1 root
                       root
                                220 Jan 6 2022 .bash_logout
4 -rw-r--r-- 1 root
                       root
                               3771 Jan 6 2022 .bashrc
                       root
                                807 Jan 6 2022 .profile
4 -rw-r--r-- 1 root
bandit1@bandit:~$ cat ./-
rRGizSaX8Mk1RTb1CNQoXTcYZWU6lgzi
bandit1@bandit:~$ exit
logout
Connection to bandit.labs.overthewire.org closed.
```

#### LEVEL2:



```
Both python2 and python3 are installed.
--[ More information ]--
  For more information regarding individual wargames, visit
  http://www.overthewire.org/wargames/
  For support, questions or comments, contact us on discord or IRC.
  Enjoy your stay!
bandit2@bandit:~$ ls -alps
total 24
4 drwxr-xr-x 2 root root
                               4096 Sep 1 06:30 ./
4 drwxr-xr-x 49 root root
4 -rw-r--r-- 1 root root
4 -rw-r--r-- 1 root root
                               4096 Sep 1 06:30 ../
                                 220 Jan 6 2022 .bash_logout
                               3771 Jan 6 2022 .bashrc
4 -rw-r--r-- 1 root root 807 Jan 6 2022 .profile
4 -rw-r---- 1 bandit3 bandit2 33 Sep 1 06:30 spaces in this filename
bandit2@bandit:~$ cat spaces\ in\ this\ filename
aBZ0W5EmUfAf7kHTQeOwd8bauFJ2lAiG
bandit2@bandit:~$ exit
logout
Connection to bandit.labs.overthewire.org closed.
```

```
For more information regarding individual wargames, visit
  http://www.overthewire.org/wargames/
  For support, questions or comments, contact us on discord or IRC.
  Enjoy your stay!
bandit3@bandit:~$ ls -alps
total 24
4 drwxr-xr-x 3 root root 4096 Sep 1 06:30 ./
4 drwxr-xr-x 49 root root 4096 Sep 1 06:30 ../
4 -rw-r--r-- 1 root root 220 Jan 6 2022 .bash_logout
4 -rw-r--r-- 1 root root 3771 Jan 6 2022 .bashrc
4 drwxr-xr-x 2 root root 4096 Sep 1 06:30 inhere/
4 -rw-r--r-- 1 root root 807 Jan 6 2022 .profile
bandit3@bandit:~$ cd inhere/
bandit3@bandit:~/inhere$ ls -al
total 12
drwxr-xr-x 2 root
                    root
                            4096 Sep 1 06:30 .
drwxr-xr-x 3 root
                            4096 Sep 1 06:30 ...
                    root
-rw-r---- 1 bandit4 bandit3 33 Sep 1 06:30 .hidden
bandit3@bandit:~/inhere$ cat .hidden
2EW7BBsr6aMMoJ2HjW067dm8EgX26xNe
bandit3@bandit:~/inhere$ exit
logout
Connection to bandit.labs.overthewire.org closed.
```



```
For more information regarding individual wargames, visit
 http://www.overthewire.org/wargames/
  For support, questions or comments, contact us on discord or IRC.
  Enjoy your stay!
bandit4@bandit:~$ ls -alps
total 24
4 drwxr-xr-x 3 root root 4096 Sep 1 06:30 /
4 drwxr-xr-x 49 root root 4096 Sep 1 06:30 ../
4 -rw-r--r-- 1 root root 220 Jan 6 2022 .bash_logout
4 -rw-r--r-- 1 root root 3771 Jan 6 2022 .bashrc
4 drwxr-xr-x 2 root root 4096 Sep 1 06:30 inhere/
4 -rw-r--r-- 1 root root 807 Jan 6 2022 .profile
bandit4@bandit:~$ cd inhere/
bandit4@bandit:~/inhere$ ls
-file00 -file02 -file04 -file06 -file08
-file01 -file03 -file05 -file07 -file09
```

```
bandit4@bandit:~/inhere$ find . type f | xargs file
find: 'type': No such file or directory
find: 'f': No such file or directory
           directory
./-file03: data
./-file04: data
./-file09: data
./-file07: ASCII text
./-file08: data
./-file06: data
./-file05: data
./-file01: data
./-file02: data
./-file00: OpenPGP Public Key
bandit4@bandit:~/inhere$ man xargs
bandit4@bandit:~/inhere$ cat .^C
bandit4@bandit:~/inhere$ cat ./-file07
lrIWWI6bB37kxfiC0ZqUd0IYfr6eEeqR
bandit4@bandit:~/inhere$ exit
logout
Connection to bandit.labs.overthewire.org closed.
eliyajerg20027@elivajerg20027-VirtualBox:~S
```

#### LEVEL 5:-

```
eliyajerg20027@eliyajerg20027-VirtualBox:~$ ssh bandit5@bandit.labs.overthewire
.org -p 2220
                   This is an OverTheWire game server.
          More information on http://www.overthewire.org/wargames
bandit5@bandit.labs.overthewire.org's password:
  For support, questions or comments, contact us on discord or IRC.
 Enjoy your stay!
bandit5@bandit:~$ ls
inhere
bandit5@bandit:~$ cd inhere/
bandit5@bandit:~/inhere$ find . -type f -size 1033c ! -executable
./maybehere07/.file2
bandit5@bandit:~/inhere$ cat ./maybehere07/.file2
P4L4vucdmLnm8I7Vl7jG1ApGSfjYKqJU
```

## LEVEL-7:

hypothalamus's CThBKKoFEnA2IhdEWXP5AYBeBZfdSjA2 uICJJ0KNdPUVRvdi6JhXEPuOVTquASmX unprivileged Z0tVNHs0hyndPzVZlRCFbUKdDT21oHIm cottoning nutritionists ELxWAaxnLEkXuHDoNl4zC0E7pnKVNERZ shocked PzEjgrwSvMhC05XlqlOmlQevGyoLuyCw AfyTYB7r9WJ8TMuQsxFsy3R6f4hPupHj precipitants WUceGwznWhEhEhdrZTEdN442JM5lOLBi burnishing codependents umfvVru8q6fDcDaR5fFls8T7U8aqVF7Z Svlvie's CqP2HlEV7HesWHXz0B7XH2Fzkn04LN53 quaffing pazr1FRMypGv2KwGoIUJYGa1jS50X4H0 flypaper's oFi6GP1v9qyJNAjbl273tlcDUMBDRf7E suing TEAxmxBmMPB2HEEMFdEY4VHGrFP6C0Ec airdropped UCOCOBcR3JahbdvfHoatOsDvC95v7J97 FY9fMziXbseKQtqXOQvLSD0MufK0i8UV oxyacetylene unbelief's B5avMsUGj0zlyl2yfHAF0r1S2h4RLkT9 loath qPdILDdfUOw04RmNkViS1OoybkoYIUCO vLmDMwo1CMsXLt7iClSmIR4mU02TCh8k Grover's Agassiz 4YUy7dcLXovPZOubd4MOsWqld0OqjB6P ambushes NXsOvOqPhGM0iB8Ib0yOTshuhcuKCOFD tyrannizes MstMwUMVi9WbH1a2yENSKoy9ndsrlsOl revivifying F35WseMsqFWELVaO9li2iZw24Xw0R5Cx pasteurizing kFcmSi4Nghwx6IriURKOyPRFmvbPoUjK Barnabas WgBcVysF7InhvJP0If0zreupigCc320S Nova's AZb10Fqv95L3fvBIjDb40eR5v106RZtM billies zLLFU9phCQ1N98lg6UNWQzvlKfm5XiZS tFfhjb3Yt0LU1qPiv7aIK6GY6ImzTcR3 quadrupling

bandit7@bandit:~\$ strings data.txt | grep "millionth"
millionth TESKZCOXvTetK0S9xNwm25STk5iWrBvP

For more information regarding individual wargames, visit http://www.overthewire.org/wargames/

For support, questions or comments, contact us on discord or IRC.

Enjoy your stay!

bandit8@bandit:~\$ cat data.txt s2ZGuAmX6cY1gJ9ER1qkXDCWTFntPJvJ 6hXvdZamDJFnfKX808UZPVjZpjeqeq6M zJmXl1uLmwGC7r6mhGj1MJ0WEepnHSoT RJizoPEBRhVuM5dF8NbRoUAcFgCYxAby QrMLTTEu3KGuydS2w9FLTTLzuRldf6f6 B3E7u3CYUKsHrS3FL40xwnQ8mV41JsmC h44iM4fCazdJGlR3i4QGaSR6FtyGmd4Q bandit8@bandit:~\$ sort data.txt
00vPFQCx20I01VN7AwqUc0d4cqR9Ecg9

bandit8@bandit:~\$ man uniq
bandit8@bandit:~\$ sort data.txt |uniq -c

1 EN632PlfYiZbn3PhVK3XOGSlNInNE00t

## LEVEL 9:



```
bandit9@bandit:~$ strings data.txt | grep "="
id6
            the
g0=89
5+&R=
V>%=
bu=
              password
iwAw=
M'j=_
        ____ is
4iu===
b~==P
ED=Fpe
,=fX
x=f+
0=6pF
do%
:26=
           G7w8LIi6J3kTb8A7j9LgrywtEUlyyp6s
 gdZ
u-;:
#U?
2BEK=q
@!6=
bandit9@bandit:~$ exit
logout
Connection to bandit.labs.overthewire.org closed.
```

```
Both python2 and python3 are installed.

--[ More information ]--

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Enjoy your stay!

bandit10@bandit:~$ cat data.txt
VGhliHBhc3N3b3JkIGlzIDZ6UGV6aUxkUjJSS05kTllGTmI2blZDS3pwaGxYSEJNCg==

bandit10@bandit:~$ man base64

bandit10@bandit:~$ base64 -d data.txt

The password is 6zPeziLdR2RKNdNYFNb6nVCKzphlXHBM

bandit10@bandit:~$ exit

logout

Connection to bandit.labs.overthewire.org closed.
```

#### LEVEL-11:

Both python2 and python3 are installed.

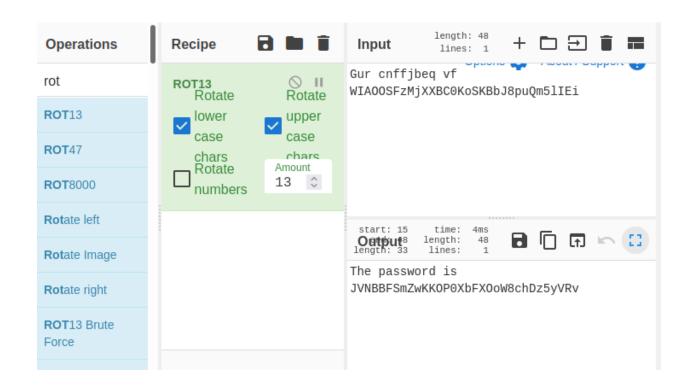
--[ More information ]-
For more information regarding individual wargames, visit http://www.overthewire.org/wargames/

For support, questions or comments, contact us on discord or IRC.

Enjoy your stay!

pandit11@bandit:~\$ cat data.txt
Gur cnffjbeq vf WIAOOSFzMjXXBCOKoSKBbJ8puQm5lIEi

pandit11@bandit:~\$ exit
logout
Connection to bandit.labs.overthewire.org closed.



## Level-12

```
bandit12@bandit:/tmp/alexis$ ls
bandit12@bandit:/tmp/alexis$ tar xf data.tar
bandit12@bandit:/tmp/alexis$ ls
data8.bin
bandit12@bandit:/tmp/alexis$ file data8.bin
data8.bin: gzip compressed data, was "data9.bin", last modified: Thu Sep 1 06: 30:09 2022, max compression, from Unix, original size modulo 2^32 49
bandit12@bandit:/tmp/alexis$ mv data8.bin data.gz
bandit12@bandit:/tmp/alexis$ gzip -d data.gz
bandit12@bandit:/tmp/alexis$ ls
data
bandit12@bandit:/tmp/alexis$ file data
data: ASCII text
bandit12@bandit:/tmp/alexis$ cat data
The password is wbWdlBxEir4CaE8LaPhauuOo6pwRmrDw
bandit12@bandit:/tmp/alexis$ exit
logout
Connection to bandit.labs.overthewire.org closed.
eliyajerg20027@eliyajerg20027-VirtualBox:~$
```

bandit13@bandit:~\$ ls
sshkey.private
bandit13@bandit:~\$ ssh -i sshkey.private bandit14@localhost
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ED25519 key fingerprint is SHA256:C2ihUBV7ihnV1wUXRb4RrEcLfXC5CXlhmAAM/urerLY.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Could not create directory '/home/bandit13/.ssh' (Permission denied).
Failed to add the host to the list of known hosts (/home/bandit13/.ssh/known\_hosts).

### Level-14

eliyajerg20027@eliyajerg20027-VirtualBox:~\$ ssh bandit14@bandit.labs.overthewir e.org -p 2220



This is an OverTheWire game server.

More information on http://www.overthewire.org/wargames

bandit14@bandit.labs.overthewire.org's password:

```
000000a0: 00c8 d01a 6874 d323 40d3 d206 81a1 a680
                                                    ....ht.#@.....
000000b0: d0c8 0190 d034 0340 0d00 c800 01a6 991a
                                                    . . . . . 4 . @ . . . . . . . .
000000c0: 0019 3400 d000 0006 800c 4d1a 0189 a001
                                                    ..4.....M....
000000d0: fc18 2890 6086 162a 8035 6a6b 3d5c 1382
                                                    ..(.`..*.5jk=\..
000000e0: 0a38 e6dd 214b 6fa4 3984 0192 256e e084
                                                    .8..!Ko.9...%n..
000000f0: ed6b ad67 3318 b07a 005d 0e21 dbd1 fb84
                                                    .k.q3..z.].!....
00000100: 770f 055f 0044 3086 8230 d579 2881 afe7
                                                    w....D0..0.y(...
00000110: 531e 3071 f859 eeae 01aa 1040 75cd 3c5b
                                                    S.0q.Y....@u.<[
00000120: f24a 16b8 34e7 43db 9e73 56a1 3d3d fd90
                                                    .J..4.C..sV.==..
00000130: 6bc3 47a5 4c73 af13 a324 5731 b90e 2063
                                                    k.G.Ls...$W1.. c
00000140: 45ef fe11 842e 03f9 b063 8f4c fb41 0a32
                                                    E........c.L.A.2
00000150: 8fdb 7cea 82a0 ee91 4e05 c610 088e a2da
                                                    . . | . . . . . N . . . . . . .
00000160: 7536 2c72 1701 c248 7ab7 1fef 30f8 142c
                                                    uб.г...Нz...О...
00000170: 0359 539c 5a21 4e94 6a33 9d18 6120 42a0
                                                    .YS.Z!N.j3..a B.
00000180: 6471 a01e 42a4 da3b 6eaa 5e7e edc3 f973
                                                    dq..B..;n.^~...s
00000190: 2ec7 5009 a7e8 101e a3ac b344 f2bb d9e6
                                                    ..P......D....
000001a0: 7bd7 c5fb 18b6 92ac 9fe8 aef4 673c da0c
                                                    {.....g<...
000001b0: 0cdb 0440 4869 1bd0 7d84 e1e5 85c2 1a60
                                                    ...@Hi..}.....
000001c0: 701c c9ac 50ca adf7 bba9 226f f175 1ec2
                                                    p...P....."o.u..
000001d0: 90de 557e ed09 5c3b 1886 84dc f110 24e7
                                                    ..U~..\;.....$.
000001e0: 871b 6148 f224 fb71 c3d1 1096 4a48 48a2
                                                    ..aH.$.q....JHH.
000001f0: 99ea 647b 4f3b ac19 3be6 1cb9 24c3 ce48
                                                    ..d{0;..;...$..н
```

## Level-15:-

```
id6
            the
g0 89
5+&R
V>%
bu:
               password
iwAw:
M'j-_
4tu
                is
b~==
ED=Fpe
,=fX
x=f+
0 6pF
 do%
:26
            G7w8LIi6J3kTb8A7j9LgrywtEUlyyp6s
 @dZ
u-;
 #U?
2BEK-q
```

-----THE END-----