# Reverse & Cracking

Crack: Crack-1

## 1. Identify the file

At first, we identify the type of the file with the command file.

```
rahmonex@Cyclop-os:~/Documents/Git/EFREI-M1-Ethical-Hacking/Reverse & Cracking/Level 1$ file crackme-1 crackme-1: ELF 64-bit LSB pie executable, x86-64, version 1 (SYSV), dynamically linked, interpreter /lib64/ld-linux-x86-64.so.2, for GNU/Linux 3.2.0, BuildID[sha1]=7c4a00c885d8366b26a21d16386b3d33991556c7, not stripped
```

File type: ELF 64-bit LSB pie executable

## 2. Basic Analysing

At first we retrieve the human readable strings in the document using the command:

'strings crackme-1'

```
__gmon_start__
_ITM_registerTMCloneTable
u3UH
[]A\A]A^A_
[input]:
Correct flag! :-) You're getting good at that!
Incorrect flag...:'(
;*3$"
Free-fL4g!ForTheLULZ
4ma2inz-F1ag!x86FTW
d0Ubtfu1-fLaG?Srsly
Real_F1AG!OrNot...
1nTeRESTING_flag!BobIsHere
14st_bUt_Not_1east_f!ag|??
GCC: (GNU) 8.2.1 20180831
```

We can see some Flags here that we can test ( since they are not a lot of them we can test one by one )

#### 3. Executing the file

As usual we need to transform the file to executable and we run it with the following commands:

```
rahmonex@Cyclop-os:~/Documents/Git/EFREI-M1-Ethical-Hacking/Reverse & Cracking/L
evel 1$ chmod +x crackme-1
rahmonex@Cyclop-os:~/Documents/Git/EFREI-M1-Ethical-Hacking/Reverse & Cracking/L
evel 1$ ./crackme-1
[input]:
```

### 4. Testing the flags

And now, we proceed with testing the Flags found:

```
rahmonex@Cyclop-os:~/Documents/Git/EFREI-M1-Ethical-Hacking/Reverse & Cracking/Level 1$ ./crackme-1 [input]: Free-fL4g!ForTheLULZ
Incorrect flag...:'(
rahmonex@Cyclop-os:~/Documents/Git/EFREI-M1-Ethical-Hacking/Reverse & Cracking/Level 1$ ./crackme-1 [input]: 4ma2inz-F1ag!x86FTW
Incorrect flag...:'(
rahmonex@Cyclop-os:~/Documents/Git/EFREI-M1-Ethical-Hacking/Reverse & Cracking/Level 1$ ./crackme-1 [input]: d0Ubtfu1-fLaG?Srsly
Correct flag! :-) You're getting good at that!
```

So the Flag is:

d0Ubtfu1-fLaG?Srsly