Challenge SpokyPass



Once I install the file, I have got the next executable file:

```
> ls

□ pass

> file pass

pass: ELF 64-bit LSB pie executable, x86-64, version 1 (SYSV), dynamically linked, interpreter /lib64/ld-linux-x86-64.so.2, BuildID[sha1]=3008217772cc2426c643d69b80a96c715490dd91, for GNU/Linux 4.4.0, not stripped
```

Let's see how it works:

```
> ./pass
Welcome to the SPOOKIEST party of the year.
Before we let you in, you'll need to give us the password: test
You're not a real ghost; clear off!
```

Apparently we must provide the correct password which we don't know. So I run **Itrace** to see closely what happen:

```
> Itrace ./pass
puts("Welcome to the \033[1;3mSPOOKIEST\033["...Welcome to the SPOOKIEST party of the year.

) = 54
printf("Before we let you in, you'll nee"...) = 59
fgets(Before we let you in, you'll need to give us the password: test
"test\n", 128, 0x7a8ebea008e0) = 0x7ffd7686fda0
strchr("test\n", '\n') = "\n"
strcmp("test", "s3cr3t_p455_f0r_gh05t5_4nd_gh0ul"...) = 1
```

```
puts("You're not a real ghost; clear o"...You're not a real ghost; clear off!
) = 36
+++ exited (status 0) +++
```

It seems a C program, it's using **stremp** to compare the user's input with the correct password (s3cr3t p455 f0r gh05t5 4nd gh0ul).

```
SHELL

> ./pass

Welcome to the SPOOKIEST party of the year.

Before we let you in, you'll need to give us the password: s3cr3t_p455_f0r_gh05t5_4nd_gh0ul

You're not a real ghost; clear off!
```

Trying I still get this. Perhaps ltrace did not show the full password string beceuse it's too long so let use **strings** to check it:

```
) strings <u>pass</u>
/lib64/ld-linux-x86-64.so.2
fgets
stdin
puts
  stack_chk_fail
 libc start main
  cxa_finalize
strchr
printf
strcmp
libc.so.6
GLIBC 2.4
GLIBC 2.2.5
GLIBC 2.34
_ITM_deregisterTMCloneTable
  gmon start
_ITM_registerTMCloneTable
PTE1
u3UH
Welcome to the
[1;3mSPOOKIEST
[Om party of the year.
Refore we let you in you'll need to give us the password:
s3cr3t_p455_f0r_gh05t5_4nd_gh0ul5
Welcome inside!
```

We have it!

```
> ./pass
Welcome to the SPOOKIEST party of the year.
Before we let you in, you'll need to give us the password: s3cr3t_p455_f0r_gh05t5_4nd_gh0ul5
Welcome inside!
```