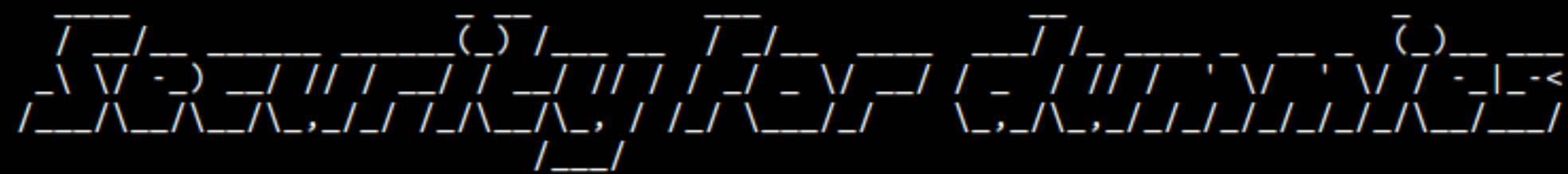


Teaching Security

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Most of my students have never followed a programming course...

- **File** - You mean a .mp3 file?
- **Filesystem** - Windows ?
- **Code/Executable/data** - You mean a .html file?

... I was super depressed! (Awesome colors!)

WHAT I TRY TO PUT IN THEIR BRAINS:

- **Lab 1** - File: data/metadata, **fuzzing**, logic bombs, **chameleons**, **werewolves**
- **Lab 2** - Filesystem: **forensics**, hashing, **carving**, covert channels
- **Lab 3** - Symmetric crypto: openssl
- **Lab 4** - Rest of crypto: openssl
- **Lab 5** - Password: john, wget, wget2, cewl
- **Lab 6** - Mock exam

```
#!/usr/bin/env bash
TARGET=$1
length=(100 8 8 8 12 12 8 1 100 6 2 32 32 8 8 155)
i=0
for offset in 0 100 108 116 124 136 148 156 157 257 263 265 297 329 337 345; do
    cp $TARGET tmp.tar

    dd if=/dev/urandom of=tmp.tar bs=1 count=${length[$i]} seek=$offset conv=notrunc status=none

    printf '          ' | dd of=tmp.tar bs=1 count=8 seek=148 conv=notrunc status=none
    checksum="$(head -c 500 tmp.tar | sum -s)"
    printf "%06o2" $checksum | dd of=tmp.tar seek=148 bs=1 count=8 conv=notrunc status=none

    tar tvf tmp.tar >> log 2>> log
    rm tmp.tar

    i=$((i + 1))
done
```



THANK YOU!

<https://ensiwiki.ensimag.fr/index.php?title=4MMSDSR-S%C3%A9curit%C3%A9Syst%C3%A8mesR%C3%A9seaux>

