

MATRITEXT - CODING 200

"The flag found in the first level leads R-Boy to the archives from the failed 1964 Mars mission: he opens the text and soon realises it looks strange – what is it hiding? Help R-Boy find out."

The challenge provides us an archive with a lot of txt files that can be found on gutenberg.org mostly novels and poems.

After some attempts we can see that most of the files are identical to the originals. The only interesting files are only the with the duplicate in the same folder:

- 2600.txt and 2600 (1).txt
- pg2383.txt and pg2383 (1).txt
- pg13951.txt and pg13951 (1).txt
- pg30452.txt and pg30452 (1).txt

From a first analysis (with a simple diff program) we can see that the pairs of files differs of some characters, in particular the duplicate versions (the ones with (1)) are slightly modified from the originals.

We wrote a very simple python script to make the char by char diff and print out the results:

```
import sys

f1 = sys.argv[1]
f2 = sys.argv[2]

l1 = open(f1).read()
l2 = open(f2).read()

for i in range(len(l1)):
    if l1[i] != l2[i]:
        print(l2[i], end="")
```

A particular thing that we have noticed is that the file *pg30452 (1).txt* was the only with the characters { and } inside, a big clue to find the flag.

If we run the comparison between *pg30452 (1).txt* and its original version we obtain another poem, in particular "CANTO XXXIII" of *Paradiso* from the Divine Comedy.

From the first line of the obtained files we can read "*ParadiTo • CantohXXXIII*", again the file differs from the original as it should be "*Paradiso • Canto XXXIII*" from Divine Comedy.

We run again the comparison with the original version and obtain... another text!

"*The Travelers a{d the Plane-TFee.*", so we compare it for the last time with the original one and the flag appear.

{FLG:r0ut3T0M4rs4ndB3y0nd}