

1-Many websites expose their ".git" files, please show how it could be dangerous.

Answer: The ".git" folder contains records of every change made to a code. That information is useful to bad actors looking for clues about vulnerabilities in the site. Information about how code is structured, which libraries are used and their versions, API endpoints, and other details about the site can be used by bad actors to develop a plan of attack. Ordinarily, this information is difficult to find, but an exposed .git repo makes life much easier for bad actors.

2- Imagine that we have  $2^{48}$  text files. Explain how can we find which files are the same.

First we read the first character of each file and compare them and now we have some set of files that have first identical character and in each set we read second char and so ... .this algorithm can implement in recursive form.

3-Write a hello-world C program and explain how we can dump its binary code with radare2.

First install radar2 in linux

```
$ snap install radare2
```

Second write the program

```
/* C code */  
  
#include <stdio.h>  
  
int main() {  
    printf("Hello World!\n");  
    return 0;  
}
```

Third compile the code and make file:

```
gcc ME.c -o M$
```

```
./ME
```

final run radare2

```
r2 -q -c 'pi $s' ./ME > ME.txt
```

the txt file has the binary

