Work & documentation notes of various the Krypton wargame

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Krypton

krypton0

Challenge: We are given a string, and told that it is encoded in the *Base-64* scheme. This is a simple encoding, and can be both encoded and reversed with the **base64** program.

```
echo "S1JZUFRPTklTR1JFQVQ=" | base64 -d
KRYPTONISGREAT
```

krypton1

Password to enter: KRYPTONISGREAT

Challenge: This level provides us with a string encoded in *ROT-13*. **tr** is a program which is used to translate one set of characters to another, it has many uses including shifting a ROT-13 cipher.

```
cat krypton2 | tr [A-MN-Z] [N-ZA-M]
LEVEL TWO PASSWORD ROTTEN
```

these sets handle both upper & lower-case characters

```
\mathbf{tr} \quad [a-mn-zA-MN-Z] \quad [n-za-mN-ZA-M]
```

Links & resources

1. When scripting, it is often useful to have a temporary directory where files can be created & modified without the risk of littering such files about the filesystem. So a temporary directory (often in /tmp/) is useful, **mktemp** does this:

move to the new temporary directory

```
\mathbf{cd} \ \$(\mathbf{mktemp} \ -d)
```

store the new temporary directory path

```
tmp_dir=\$(\mathbf{mktemp} - d)
```

2. Git is has many fantastic functionalities, here are some key ones:

compare working tree with committed version

```
git diff <filename>
```

reset working tree file to the committed version

```
git checkout -- <filename>
git restore <filename>
```

 ${\it Note:}$ These two methods are destructive, and discard any changes, ${\it git \ stash \ may}$ be more suitable, as it backs up the working tree/changes