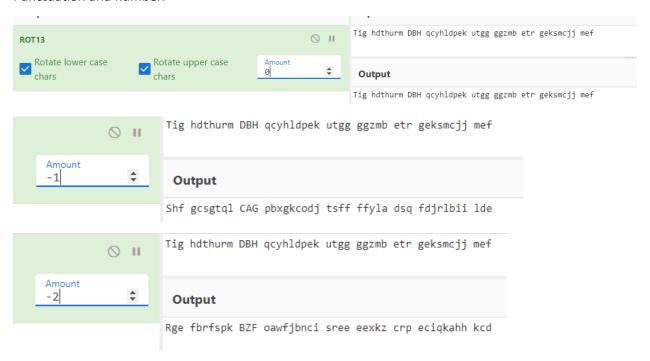ROT of a different sort

200

The attached file was created with a ROT program we found online, but ROT13 doesn't work and we're not sure what else to try. Can you help us out?

I was messing around with CyberChef and after going with all the various rots, I started seeing a pattern on the first word. It is a three-letter word, so it has to be fairly easy to figure out what the first word could be.

It had to be a ROT13 of some sort as the punctuation and changes do not change. Rot47 changes Punctuation and number.

In decrementing by 1 we see that the first word is The!

You can try to convert the code above, or we can try to write a script that will do it for us, so I attempted to write a script, and in more time to decode the message I got a script that works.

I wrote this PowerShell script:

Posted code here:

```
$encode = "Tig hdthurm DBH qcyhldpek utgg ggzmb etr geksmcjj mef qi ynl rxoqk dv lay
yeyqadvhv hlqwq dbhpjvv. Vhqfnuhj rtz zxdlfrr, jhtwzo ymd rxrhzbicszz giycd wjjqphbvvh
yu bqo uaqgudwgn kc shf lrike. Dsq taqx rip xpd mqrontn oyc vg
hflb_do_y_bjv_hnlmmaoyf_tged_kio13. Ig bsz zwufpp hwyj pcod AxbftFljl qwceqnr ew t
nyogotjpj tx xayrdnabyey fvjdszgf, M nvxn jah hxrjx odb qedksi evc edqq lykz nca ASF
qukftphnbd!"

$text=$encode.ToLower()
$out =""
for ( $i = 0 ; $i -le $text.Length ; $i++ ) {
    $t = [int]$text[$i]
    if ($t -ge 97 -and $t -le 122){
        $charlimit = $i %
        $rot=$t-$charlimit
        if ($rot -lt 97){
            $rot +=26
        }
    } else {
        $rot=$t
    }
    $out += [char]$rot
}
$out
```

the dynamic rot algorithm used bases the rotation off of the index of the character
being rotated. although not rotated, spaces and punctuation still contribute to the
increment of the index. the flag you are looking for is
roti_is_a_bit_different_from_rot13
. if you solved this with cyberchef instead of a scripting or programming language, i
hope you share the recipe you used with the ctf organizers!

Flag: roti_is_a_bit_different_from_rot13