

DC423 Challenge

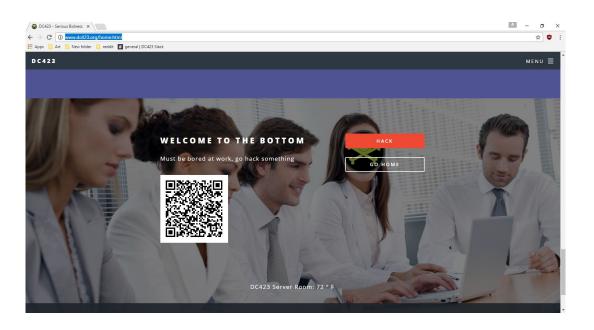
Decoding FTW





Step #1 (Grab QR Code)

On the homepage for DC423, there's a QR code







Step #2 (QR Decode)

Got the link for the qr code image and plugged it into an online QR decoder.

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→ C 🗎 Secure https://zxing.org/w/decode?u=http%3A%2F%2	Fwww.dc423.org%2Fqrcode.png		2 €	☆ ©	,
Apps 🧧 Art 🧧 New folder 📋 reddit 🎁 general DC423 Slack					
₹ D	ecode Succeeded				
Ram text	L2 G30YL0300F1eZZUYDF1eZtHYT41eZ2HUUd1eP3HeEeHeV2HUUg1el3IuAeHYZsTOZ4IYPsHYPuIuLFTuZ3IYxrHeLsHebr1eAgH0ZrH0AdHR0=				
Raw bytes	47 24 C 20 06 04 47 21 45 75 44 25 96 55 27 44 85 95 46 45 96 55 23 25 5 94 47 24 95 55 24 48 59 57 44 82 95 54 34 48 96 55 26 32 54 85 55 23 24 86 75 56 74 86 55 57 36 24 86 75 57 48 85 56 24 86 55 56 23 24 86 75 56 74 86 55 56 23 24 86 75 56 74 86 55 56 24 86 55 56 23 24 86 75 56 74 86 55 56 23 24 86 75 56 74 86 55 96 75 48 85 95 60 75 48 85 96 07 54 85 96 96 07 54 85 96 96 96 96 96 96 96 96 96 96 96 96 96				
Barcode format	QR_CODE				
Parsed Result Type	TEXT				
Parsed Result	L2 G30YL8300F1eZ2UYDF1eZtHYT41eZ2HUUd1eP3HeEeHeV2H0Ug1eL31uAeHYZsTOZ41YPsHYPuIuLrTuZ31YxrHeLsHebF1eAgH0ZrH0AdHRD=				





Step #2 (base64...kind of)

This gave me the level 2 code which looks like a base64 string

L2

G3OYL0JODrleZ2UYDrleZtHYT4leZ2HuUdleP3HeEeHeV2HOUgle L3luAeHYZsTOZ4lYPsHYPuluLrTuZ3lYxrHeLsHebrleAgHOZrHOA dHRD=

Decoding fails...wtf??





Step #3 (ROT5)

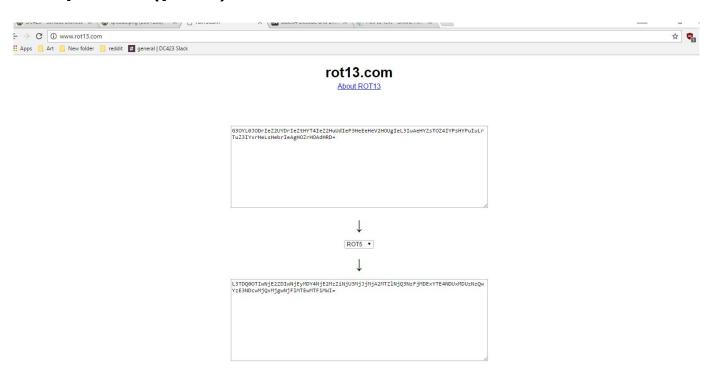
Counting the characters, it looks like the string is 2 characters too long. We know that the format of the clues start with L#. The string from L2 starts with "G3". ROT5 gives us:

L3TDQ0OTIwNjE2ZDIwNjEyMDY4NjE2MzZiNjU3MjJjMjA2MTZIN jQ3NzFjMDExYTE4NDUxMDUzNzQwYzE3NDcwMjQxMjgwNjFIM TEwMTFiMWI=





Step #3 (pic!)







Step #4 (base64...finally)

Remove the "L3" from the beginning and base64 decode, we get:

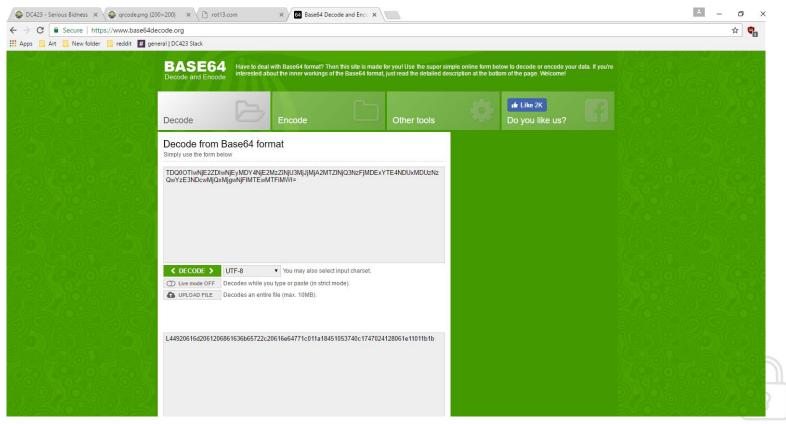
L44920616d2061206861636b65722c20616e64771c011a18451053 740c1747024128061e11011b1b

There's that L# again...





Step #4 (pic)

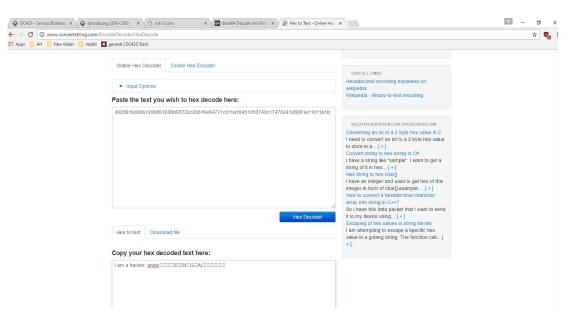




Step #5 (Hex Decode)

Let's strip off that L4 and do a hex decode:

I am a hacker, andwEStGA(







XOR (This is where I got lost)

There's some junk at the end but come on. We know what that statement says "I am a hacker, and this is my manifesto."

I had to ask for help here as I had never heard of XOR encryption.

What happens if we XOR what we got from Step #5 with what we know the statement is?





XOR (part deux)







HEX Decode...again

We strip the leading zeros and decode the rest:

Whiskey Tango Foxtrot





Resources Used

https://zxing.org/w/decode.jspx

http://www.rot13.com/

https://www.base64decode.org/

http://www.convertstring.com/EncodeDecode/HexDecode

http://md5decrypt.net/en/Xor/

