1 Part 1: A Most Curious Business Card

Alright, so the business card that dear ol' Santa dropped is the one seen in Figure 1. It shows that Mr. Claus is using both Twitter and Instagram.

Figure 1: Santa's business card

1.1 What is the secret message in Santa's tweets?

First things first, looking at Santa's tweets, well, makes me think of a madman. More specifically Wanev[1]. However, that illusion was quickly dispelled, and I realised that I'd probably have to fetch all the tweets to see what was up with them.

I'll admit though, that I was a little bit on the lazy side when I solved this challenge. I didn't have a script to fetch the tweets and there weren't that many that I bothered writing one, so here's how I did.

So what I did was to load all the tweets by Santa in my browser. This involved scrolling down for a little bit. Once there were no more tweets to load, I pressed CTRL+A to select all text on the page and then I copied it.

Next step was to paste it into a text editor, from here it's clear that the content of each tweet is the same length, this can be seen in Figure 2.

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[1]The old coordinator of the Residence For The Magically Deviant, who gave memoes of "nonsense" when talked to. Seriously though, *always keep the pentaloons.*

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27    instagram.com/santawclaus
28     Joined November 2016
29
30    Tweet to Santa
31
32    Tweets
33    Tweets  Tweets & replies
34     Santa @SantaWClaus  Nov 14
35    SANTAELFHOHOHOCHRISTMASSANTACHRISTMASPEACEONEARTHCHRISTMASELFSANTAELFHOHOHO
36    95 replies 15 retweets 23 likes
37    Reply  95    Retweet  15
38    Like 23
39    More
40     Santa @SantaWClaus  Nov 14
41    GOODWILLTOWARDSMENSANTAPEACEONEARTHHOHOHOJOYSANTAGOODWILLTOWARDSMENJOYJOYQQ
42    4 replies 2 retweets 0 likes
43    Reply  4    Retweet  2
44    Like
45    More
46     Santa @SantaWClaus  Nov 14
47    GOODWILLTOWARDSMENGOODWILLTOWARDSMENJOYHOHOHOJOYELFELFPEACEONEARTHJOYHOHOHO
48    2 replies 2 retweets 0 likes
49    Reply  2    Retweet  2
50    Like
51    More
52     Santa @SantaWClaus  Nov 14
53    GOODWILLTOWARDSMENSANTACHRISTMASCHRISTMASPEACEONEARTHNORTHPOLEHOHOHOELFELFQ
```

Figure 2: Santa's tweets, unfiltered.

As it turns out, the content of the tweets are 75 characters each, this makes removing all the other junk a small task. To remove all the unwanted lines I used a little bit of regex-magic.

Firstly replacing all lines that were not exactly 75 characters long with an empty string (Figure 3) and secondly replacing all multiples of newlines with a single newline (Figure 4).
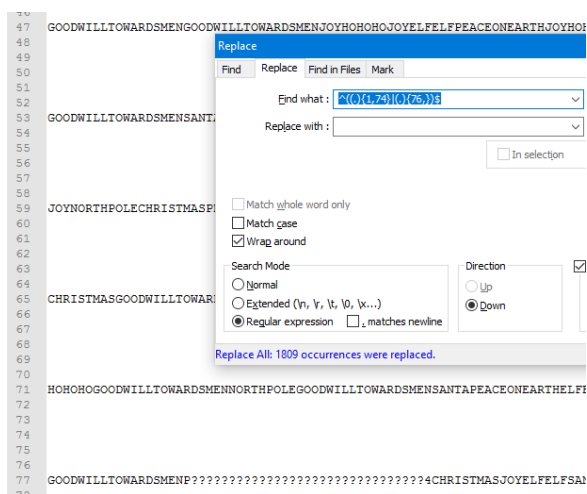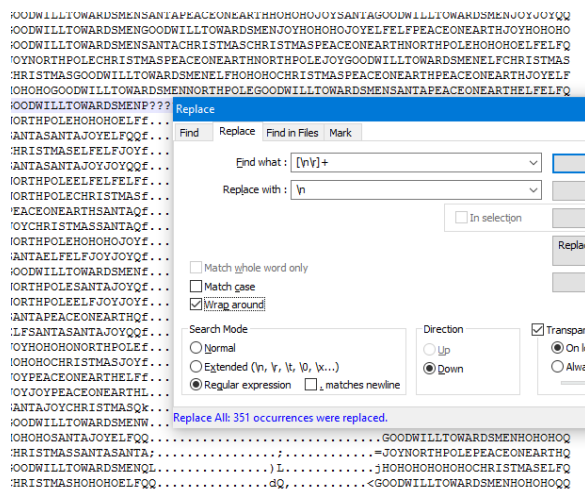

Figure 3: Santa's tweets, 1st pass.

Figure 4: Santa's tweets, 2nd pass.

After doing this, some text is revealed, it is possible to see the outline of a B in Figure 4, however, zooming all the way out and rotating the text reveals the secret that is hidden in dear ol' Santa's tweets.
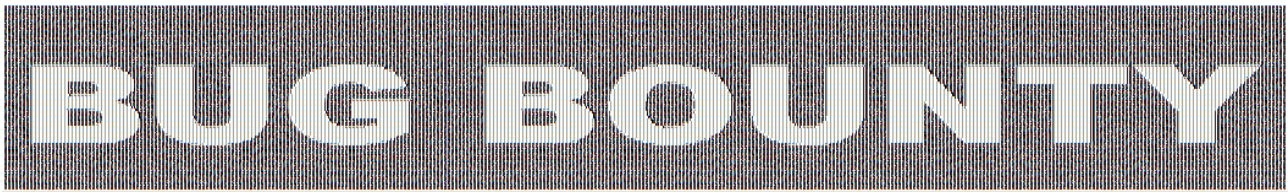
Figure 5: Santa's tweets, revelation.

1.2   What is inside the ZIP file distributed by Santa's team?

Uh, what? What ZIP file? ... I spend more time on tracking down the ZIP file, than I care to admit. Anyway, here is a run-down of the process of finding said ZIP file.

I guess we're done with Twitter, so visit Instagram and see 3 beautiful images, two of which I discard more or less at a glance, however Figure 6 looks promising.
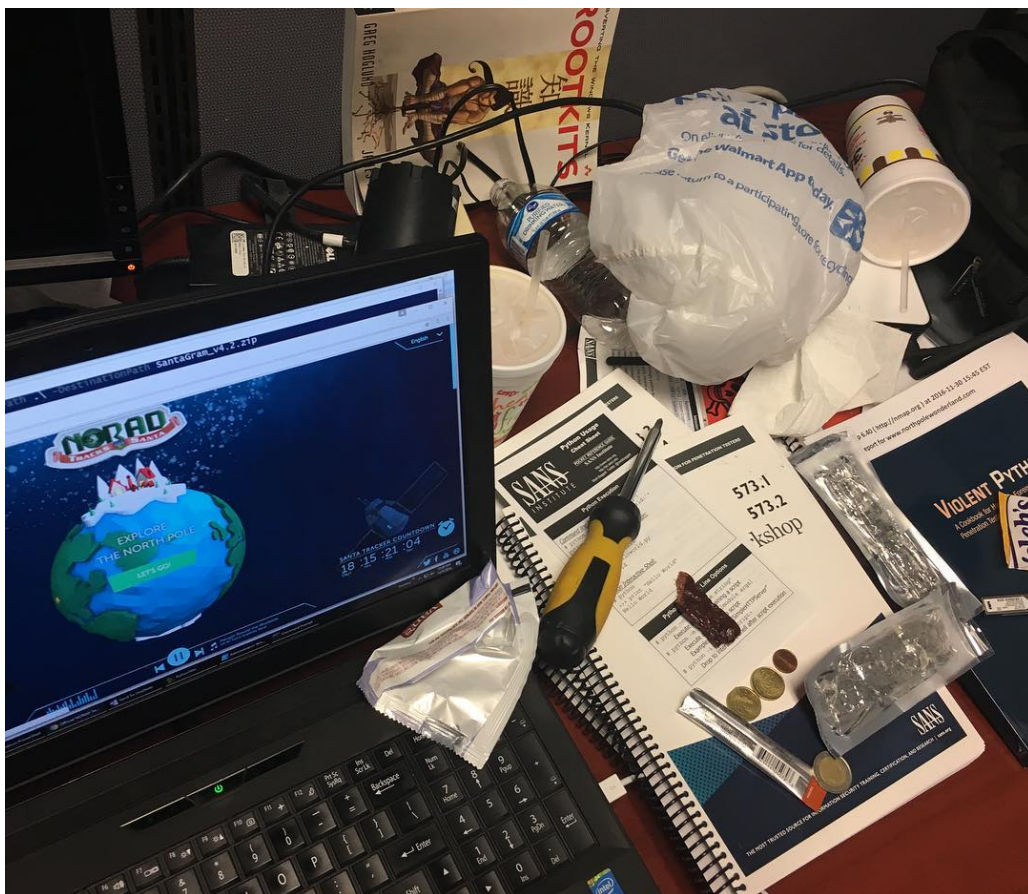

Figure 6: Hermey's messy desk. Unlike mine, which is sparkling...

It doesn't take long to notice the filename of the ZIP file, this can be seen in Figure 7. But uhm, where exactly should I find this file..? And this is the part that took me longer than I
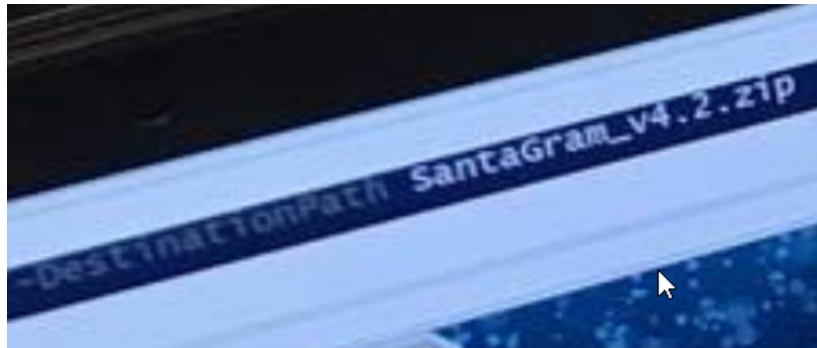
care to admit..

Figure 7: The filename of the ZIP file.

What else is on that picture, a reference to a SANS course, Violent Python, an NMAP report[2], some half eaten beef jerky(?), a screw driver, various coins, a book called Rootkits, etc. etc. etc., so I think to myself, alright, maybe that's what there is to find in this picture. Time to look at the other two. Now after looking at the other pictures for a while, going back to Twitter to see if I missed something, then going back to Instagram[3], because surely, I must've missed something.

Aaand suddenly, lightning strikes and I spot the thing that I've completely missed/ignored the whole time. Yup, it's a website, and it can be seen in Figure 8.
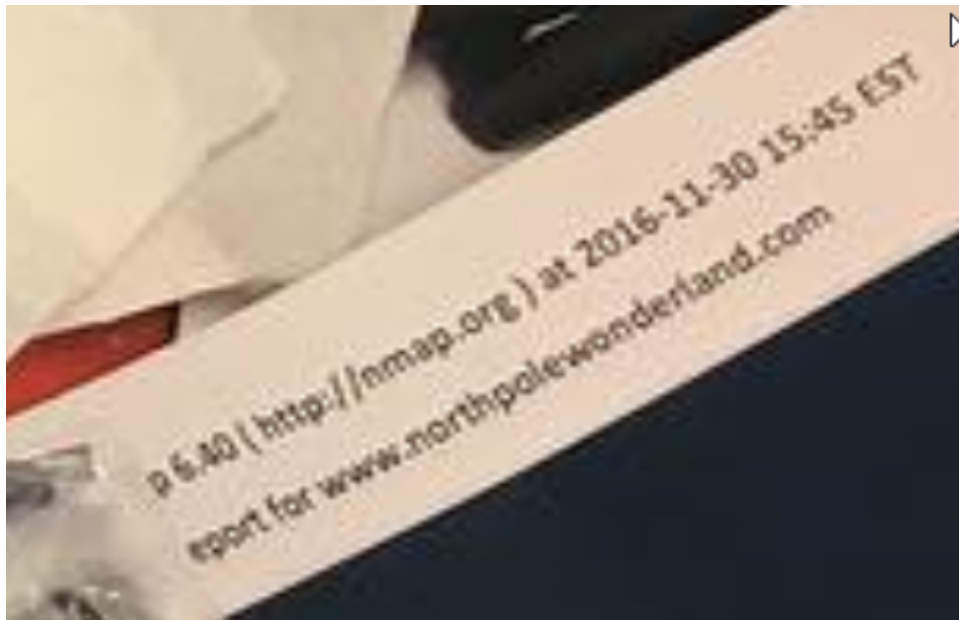

Figure 8: The filename of the ZIP file.

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[2]... Yup, I completely missed that.
[3]I even created an Instagram account, just to make sure that something wasn't hidden behind a login.

Time to put the two pieces of information together and visit www.northpolewonderland.com/SantaGram_v4.2.zip and see what's inside the cursed ZIP archive. As seen in Figure 9 there resides an APK file.

Name	Size	Packed	Type	Modified	CRC32
..			Local Disk		
SantaGram_4.2.apk *	2.257.390	1.962.826	APK File	09-12-2016 08:47	EDE16A54

Figure 9: Contents of ZIP file.