COMP 232: Cybersecurity

http://cgi.csc.liv.ac.uk/~alexei/COMP232/index.html

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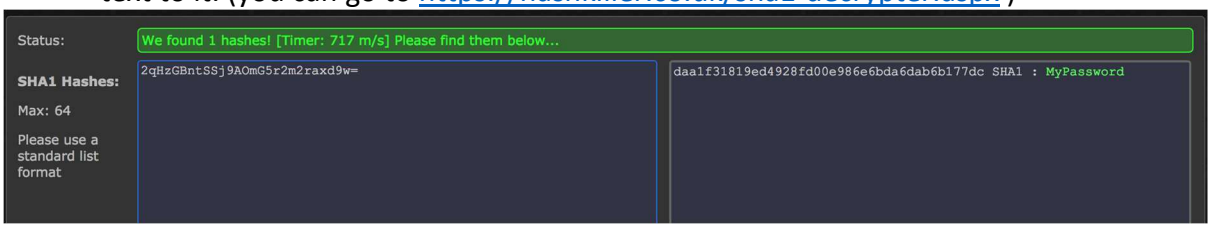
Lab 1 Practical Attacks on Passwords

LAB #1.1 –Hash table attack

1- Create a hash to any password that you want to attack, you can use www.sha1-online.com for that (or any other way). For example, the SHA1 hash for password (MyPassword) is (2qHzGBntSSj9AOmG5r2m2raxd9w=)

2- Copy the hash and go to any public sha1 hash table website and try to get equivalent text to it. (you can go to https://hashkiller.co.uk/sha1-decrypter.aspx)



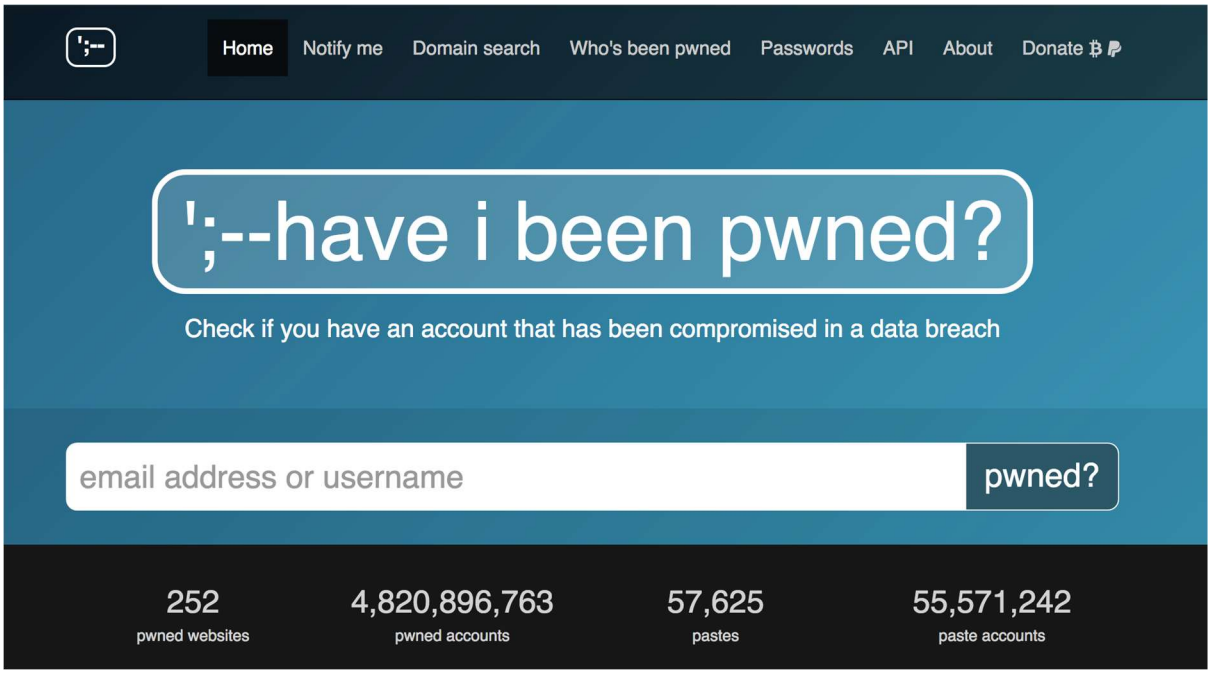
3- Can you do hash table attack for the following password (sha1 hash) and by using the same website.

N	Password	Yes I can / No I can not
1	P@$$W0rD	
2	Thisismypassword	
3	VeryLongP@$$W0rD	

4- What is a shortest password you can find for which the above hash table attack is unsuccessful?

LAB #1.2 – Have My account password leaked to attackers

1- Open https://haveibeenpwned.com/
2- Provide your email and check if your account password has been leaked before by the attacker. If you, you have to change your password.



LAB #2.4 – How long to offline brute-force password

Note:
- Don't Enter your real password
- The time it will take depends on processing speed

1- Open https://howsecureismypassword.net/ and https://password.kaspersky.com/

2- Try the following passwords in the table and check the time needed to brute-force them

3- Can you propose a password which you would easily remember and which would have estimated 1 Day to crack it (by either services)?

Password	Time on howsecureismypassword.net	Time on Kaspersky password checker
P@S$W0rD		
thisismypassword		
VeryLongP@$$W0rD		
%O^t#2Fv0JUjVdRV2RW%		

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