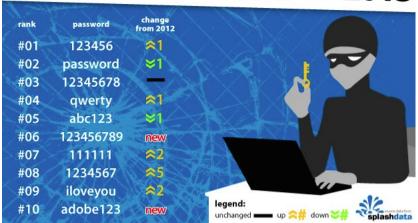# Digital Citizenship Assignment 1 – Digital Security

Assignment 1: Battleship

The classic board game Battleship would last only seconds if two computers were playing it. Computers can guess numbers and letters at remarkable speeds, and it is not humans who are trying to hack into your online accounts but rather sophisticated computer programs working while the criminals are sleeping.

Have a look at the below examples of the worst passwords you could use to protect your online life.

Or this list:

Here's this year's worst passwords list:

1. 123456 (up 1)	2. password (down 1)	3. 12345678 (unchanged)	4. qwerty (up 1)	5. abc123 (down 1)
6. 123456789 (new)	7. 111111 (up 2)	8. 123457 (up 5)	9. iloveyou (up 2)	10. adobe123 (new)
11. 123123 (up 5)	12. admin (new)	13. 1234567890 (new)	14. letmein (down 7)	15. photoshop (new)
16. 1234 (new)	17. monkey (down 11)	18. shadow (unchanged)	19. sunshine (down 5)	20. 12345 (new)
21. password1 (up 4)	22. princess (new)	23. azerty (new)	24. trustno1 (down 12)	25. 000000 (new)

Assignment 1:

1. Would you say the passwords listed as the worst are easy to guess or hard to guess and why? (2)

2. Have you ever used any of these passwords? If yes how do you feel about this list? If NO why not? (2)

3. Do you think seniors and adults are more likely to use these passwords? What can we do to save them some disastrous con- sequences if they do? (2)

4. Can you think of three extra horrible passwords not found on this list? (3)

5. How long should a modern password be to be called strong? (This might be a trick quest) (2)

6. If you are using any passwords like these make sure to go home tonight or use some time right now to change these passwords to something less risky and more secure. THIS IS IMPORTANT HOMEWORK!

--‾

Assignment 2: Hercules Code
So we have seen the examples of the weakest and worst passwords a person can use to protect their online life..... Let's take a look at the strongest passwords you can use.

A modern **STRONG** password is **not** a single word, it is **not** a word with numbers, it is a **FULL SENTENCE** complete with the following:
Capital and lowercase lettering
Symbols
Numbers
Here is an example:
If someone were to HATE (never use things you like) the **Toronto Maple Leafs**, they could use this theme as nobody would expect it.
Sentence " Toronto Maple Leafs lose forever kids"
Now that would be a pain to peck into a smartphone over and over so let's shorten it and strengthen it at the same time.
TMLLose4evakids   - it is long enough but still just letters and numbers

Let's make the S a $ sign and the letter "e" let's flip into a number 3 (backwards E)
TMLLo$343vaKid$ - Now this is a very very strong password that Microsoft would call "BEST".
All you have to do is remember what the sentence says and spot where you may have tweaked it. Computers can still crack this but it would take FAR TOO LONG and so they would just move on to a new target.

Kapersky's Password Checker:
[**PASSWORD CHECKER HERE**](https://password.kaspersky.com)
https://password.kaspersky.com
Complete the following:
1. **Paste in the above Mr. Kelly password TMLLo$343vaKid$** to prove it is BEST
2. Make sure nobody is looking and **test a few of your passwords** to see just how WEAK or STRONG they are. *It will tell you how long a normal computer takes to guess your password running a simple guessing program.*
3. Make up a password that is AWESOME using the tips above and write it down for your teacher to check. Make sure this is one you would **not really use yourself**. (3pts)