1. Give the titles and URLs of *three more* Tom Scott security-related videos you watched (to completion), together with a sentence or two on the purpose or lesson if each video.
   1. [The Effective Power Bug: Why Can Weird Text Crash Your iPhone?](https://www.youtube.com/watch?v=hJLMSllzoLA)   
      Tom Scott explains a bug that occurs when an iPhone receives a certain text message causing the phone to crash. A possible reason as to why the phone crashes would be due to mishandling the Arabic characters while attempting to shorten the text message to fit in a notification banner.
   2. [Why Electronic Voting Is Still A Bad Idea](https://www.youtube.com/watch?v=LkH2r-sNjQs)   
      The main idea is ‘electronic voting is a bad idea’. The reason is that the trust in electronic voting system is easily broken. Although there are ways to cheat with paper votes, this system has been used for over a century, so there are countermeasures in place to ensure a voter’s trust in the system. However, electronic voting does not have the same guarantee as paper votes and as technology advances, new methods of exploiting vulnerabilities can be discovered.
   3. [Hashing Algorithms and Security - Computerphile](https://www.youtube.com/watch?v=b4b8ktEV4Bg)   
      Tom Scott explains what hashing, the avalanche effect, and hash collisions are, and why hash collisions are a security concern to validating a documents authenticity.
2. Write a module defining a secure, expandable array-based stack of strings in C. (We will do a non-expandable version in class.) Fail fast by crashing with an error code (a different code for each type of failure), or return a “response object” that caller can use to determine whether the operation succeeded, or if it did not, what happened.

[GitHub Link](https://github.com/Ulq15/CMSI662_Secure_Software_Development/tree/main/HW3/Problem2) to C program

1. Write a class for a secure expandable array-based stack of strings in C++, using a raw array of smart pointers for the stack. In practice, C++ programmers have a standard stack class, but in this course we are interested in building secure structures from first principles and getting practice with all the various features (and warts) of C++. Fail fast by throwing exceptions.

[GitHub Link](https://github.com/Ulq15/CMSI662_Secure_Software_Development/blob/main/HW3/Problem3.cpp) to C++ program

1. Write a class for a secure expandable array-based stack of strings in Java. Fail fast by throwing exceptions.

[GitHub Link](https://github.com/Ulq15/CMSI662_Secure_Software_Development/blob/main/HW3/Problem4.java) to Java program