**Task**

You have been tasked with solving a series of challenges on picoCTF. You will use your learning outputs as evidence to guide the marker to what you have learned and at what level and to highlight/market your learning to non-technical third parties.

You should treat this assignment as Assignment Item 3 (Evidence Guide) and Assignment Item 4 (Innovation Showcase).

At a minimum, you must complete CTF activities covering web exploitation, cryptography, reverse engineering, and forensics. Furthermore, it is recommended that you complete the following CTFs

* Web Exploitation: don't-use-client-side and picobrowser
* Cryptography: la cifra de and john pollard
* Reverse Engineering: vault-door3 and vault-door 4
* Forensics: so meta and extensions

Note you may need to do other activities to learn or refresh the skills to complete these tasks.

A second note: You may choose to complete other (or more) tasks at your discretion.

**Each must include the following at a minimum**

* Evidence of your project/work over the term
  + A writeup/explanation of each problem solved
  + A bibliography of any supporting documentation that you used (if in doubt, use APA 5th)
  + Video evidence of your solution in its most complete format.
* A series of short journals responding to different unit goals/descriptors/etc.
* An Evidence Guide (PowerPoint)
* Innovation Showcase Poster and Presentation (Poster + video(s))

# Tool of learning

The best learning happens when we stop and think about what we've done, what worked, what didn't, and what we would do next time.

With this in mind, the lion's share of marks will focus on what you've learned in the project process, with the project itself being the journey and not the destination.

## Submission Guide

#### Journal responses

The journal responses will be asking questions similar to the questions below. They are used to prepare to look at your work and produce your Evidence Guide and Innovation Showcases.

#### Evidence Guide and Innovation Showcase

The Evidence Guide and the Innovation Showcase rely on you responding to some questions. The questions are the same for both sections, but you will answer them differently. These questions will be heavily based on the goals and content of the unit. In this case, we are using the Unit Goals from Digital Technologies: Structured Project

1. What is it you did this term, and what did you learn?
2. How may your learning impact your understanding of Network Administration and Security?
3. What is Web Exploitation, and why is it essential for Network Administrators to understand?
4. What is Cryptography, and why is it beneficial for Technology professionals to understand?
5. What is Reverse Engineering, and why is it essential for Technology Professionals to understand?
6. What is Digital Forensics, and how is it used in Network Administration?
7. What skills, tools, or processes have you developed to use or support you in solving complex network/systems problems?
8. What management strategies did you use to keep yourself, or put yourself back on, track? How/why did this impact you?

##### Evidence Guide

Evidence Guides are a personal response to the questions above. However, they focus on reporting to a technical expert (me) on what you've done this semester.

In this case, the Evidence Guide must be completed in a PowerPoint format (or similar analog). You must answer **four** questions, but only **two** are mandatory: "What is it that you did this term, and what did you learn" and "How may your learning impact your understanding of Network Administration and Security?". You may select which of the other two questions you want to respond to in a technical format. The remaining two questions must be answered in your showcase.

Each question can contain no more than three slides. On top of the style guide requirements (found below the rubric), you may include a short passage in the author's notes to extrapolate the idea further. However, each question can have no more than 250 words in total.

##### Innovation Showcase

Innovation Showcases are focused on informing people with a diverse understanding of technology. It must be helpful for someone in year ten coming to an open night but informative for your peers to understand the cool things you've done.

Unlike the evidence guide, you do not need to respond to all the questions above. You must answer **four** questions, but only **two** can be repeated: "What is it that you did this term and what did you learn" and "How may your learning impact your understanding of Network Administration and Security?". The other two questions must be ones you haven't addressed from the list above.

Innovation Showcases will consist of 1 or more connected posters based on the provided template. You are not required to design your own template and must align with the broad design template given to you.

Additionally, you must submit a series of short presentations focused on each question for 6 minutes.