For the first big team exercise you need to work in groups of 4 or 5. To develop a hack for a game. I recommend using the Pwnie Island game demonstrated in lectures (links to this are on the main page). Your goal is to analyse the binary and develop patches for it that show you understand what the binary is doing and how it works.

You will be asked to give a 15min team demo of your work to the in Week 6's lecture. I also what you to submit notes to Canvas explaining what you did by the end of week 7. These notes should be short, but detailed enough for an other student to be able to reconstruct what you did.

I will arrange 2 meeting between your team with myself and/or Dan, the first to discuss your planned work and the second to discuss how to presented.

This is an open ended exercise, I expect that each team member will spend about 20 hours on this (I will expect the teams of 5 to get a little more done than the teams of 4). N.B. I am not looking for a "cheat" that gives you an advantage in the game, I am looking for you to demonstrate that you understand how to analyse a big binary, and that you are capable of making meaningful changes to it.

Very roughly, you will get a pass mark for reconstructing a demo I did in lectures, or something from an online tutorial. Using exactly the same methods e.g., applied to other simple game variables, could get you a high pass or low merit grade. A high merit need to show very good mastery of basic skills. For a distinction level mark, you need to do something truly distinctive, e.g. methods beyond what was shown in lectures (e.g. networking, additional graphics) used in an interesting and inventive way.

N.B. if you decide to look a Valve games you must do this by first creating a dummy account and then adding the "-insecure" flag to the start up option. Do not use your main account for this. Likewise do not look at any other online game. The chance you will be banned is too great. ***Do not use cheats in online play with people outside this module, this is unethical behaviour.***