**Learning Journal**

**Task 1 – Basic 2D Movement**

Looking at 2D movement tutorials online, I found that player movement can be done in a number of ways. The way I ended up choosing was the one that referenced the rigidbody as it is something, I have had no experience in previously. I learned that the rigidbody uses force, which makes using it for movement include the effect of things like gravity.

**Task 2 – Collectable**

I learned how to cross reference scripts, allowing me to keep the scoring element on my player controller but have the collectable add to that number. It forced me to learn how to write a script that looks for variables externally and to learn the difference between GetComponent<> and FindObjectOfType<>, the former checking for a script on the object that this script is attached to and the latter looking for a script in the whole scene.

**Task 3 – Score UI**

I learned to use the UI layer. I also learned how to make text that changes based on a variable in another script. I learned that (contrary to my coding note) you can have the script on the UI element and not the character. This code took me some time to figure out and as such I ended up trying a variety of ways that did not work until I ended up with what I submitted.

**Task 4 – Hazard**

I learned how to destroy objects. A thing that I kept coming into problems with was that instead of destroying the player object (which was the intention) the hazard would be destroyed on the collision instead. After watching some tutorials, I realised it was because I was not looking for another collider I was referencing the hazard’s collider.

I also learned how to use tags and how to reference tags in a script.