TUPLE AND SET

Let’s start off with some basics of set and tuples:
https://www.geeksforgeeks.org/python-tuples/
https://www.geeksforgeeks.org/sets-in-python/

Extra :
https://www.youtube.com/watch?v=Mf7eFtbVxFM

When to use Tuples :
Tuples are used to group together related data, such as a person's name, their age, and their gender. An assignment to all of the elements in a **tuple using** a single assignment statement. **Tuple** assignment occurs simultaneously rather than in sequence, making it useful for swapping values.

Further reading :
http://openbookproject.net/thinkcs/python/english3e/tuples.html#:~:text=Tuples%20are%20used%20to%20group,their%20age%2C%20and%20their%20gender.&text=An%20assignment%20to%20all%20of,it%20useful%20for%20swapping%20values.

When would you use a tuple vs a list?

Now that **we** know the differences between python **tuples vs lists**, it shouldn't be a very tough choice between the two. The major difference is that a **list** is mutable, but a **tuple** isn't. So, **we use** a **list** when **we** want **to** contain similar items, but **use a tuple** when **we** know what information goes into it.

Why tuple is faster than list?

Tuple has a small memory.**Tuple** is stored in a single block of memory. **List** is stored in two blocks of memory (One is fixed sized and the other is variable sized for storing data) Creating a **tuple is faster than** creating a **list**.

When to use set :
sets cannot have multiple occurrences of the same element, it makes **sets** highly useful to efficiently remove duplicate values from a list or tuple and to perform common math operations like unions and intersections.

Accessing a **Set**
Set items cannot be accessed by referring to an index, since **sets** are unordered the items has no index. But you can loop through the **set** items using a for loop, or ask if a specified value is present in a **set**, by using the in keyword.