**Python Imports, Enums and Classes:**

1. Imports is a way to bring code from other files to your file, for example if you want to bring an external library, we need to import it. Its useful if you want to break your code into more organized and manageable files.
2. When we import a file to our file, we need to use its relative path to my file.
3. When we call our file “main” , \_\_name\_\_ will be “main” so this is a way to ensure we run the main file. This is to avoid code from our imports to run with the main file.
4. Classes is a way to organize our data inside our code by creating a data type that suits our needs.
5. We want to use classes firstly because it’s a more organized and elegant way to store data.

Secondly, it provides the ability to reuse code, that is more efficient and saves time.

Finally, it adds the ability of inheritance that I will explain later.

1. Characteristics of classes are essentially the variables of the class(data type) we made that we need to declare when creating an object. If we make a person class, the name is one of the characteristics we need to add to the class.
2. If classes is the blueprint of an object, object is a collection of variables and functions.

For example if we made a person, we will have an object with the age of the person, name and exc…

1. When we create an object we will call its constructor function, which will assign the variables to a new object and save it in the memory. On the other hand we have destructor that is a function that will delete the object and free the memory.
2. The class keyword is used to create a class and name it, Self represents the class, by using self we can access the attributes of a class while in the making.
3. Class inheritance is a way to inherit all the attributes and methods of a class into a new class, in python we can inherit from multiple classes to a new class. We will use it when we for example made a generic class like “person” and now we want to make a class “teacher” , a teacher is a person so we can use the inheritance. We will just add the name of the class in the new class near the keyword.
4. Polymorphism is a concept that says that every class that inherit other classes is its own type and the inherited classes type.
5. Static function is a function that is inside a class, when we want to use the class we don’t need to create an object, we can just call the function inside a class.

ENUMS:

1. ENUM is a type we define in order to show values in an elegant way inside a class in order to avoid bugs in the code.
2. ENUM will make the code more readable because we will use names instead of values, Enums will help avoid typos.