## IMPORTS

1. **הסברי בקצרה מהו import, מתי הוא שימושי ומה הוא עושה.**

Import is a way to access code in another module. We use it when we want to get code from other places (for example random, math…).

1. **כאשר מבצעים import לקובץ שלנו מקובץ אחר, איזה נתיב יש לתת בimport ?ביחס לאיפה הנתיב נמצא? )נתיב לדוגמא : file\_my.subdir)**

So it depends what you want to import and where that file is located, alot of files are located locally. So if you want to import the whole file you can write “**import file**”

However, if you want to import a specific function from that file, you can do that by calling via it’s file so for example “**from file import function1**”.

however , if you want to import from another folder you will need to specify where that folder is.

1. **הסברי בקצרה על התנאי (“\_\_main\_\_ == “\_\_name(\_\_if. מדוע משתמשים בו? מה הוא מונע?**

That condition make it so that you can use any of the code that’s written within it in other files. Because how it works is that when it’s called it checks if that name of the file is main, and only the original file is called main, and if you call that function to another file the name that will come out will be the name of the calling file.

So we use it by default so that no one can call the code from our file.

## CLASSES

1. **הסברי בקצרה מהם מחלקות / Classes.**

Classes are used to create new objects (cars, people…) allowing us to use them throughout the code.

1. **מדוע נרצה להשתמש בהם? איך הם עדיפים על יצירת משתנים פשוטה? תני לפחות 3 יתרונות**

The reason why we’d want to use them is because they’re easy to use and can be changed from case to case but with the same base. So for example a call person can have 2 eye, nose, mouth, name, age… but for each instance of the class we can define a different kind of person.

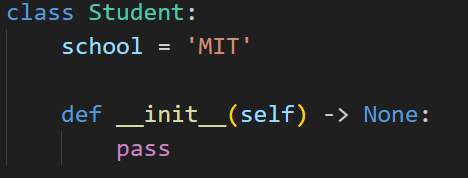
The reason why we’d use a class over a basic variable is if we have a lot of info that we want to save on one thing and we’d want to be able to change that info from instance to instance.

3 reasons why it’s better:

1. Way more versatile when it comes to creating new instances of the same thing.
2. You can personalize info from instance to instance.
3. You can add function to the class, and you can’t do that to a variable.

**6. הסברי את המושג תכונה של מחלקה. תני דוגמא.**

A class attribute is a variable that is defined outside the \_\_init\_\_ function, it’s a value that come by default to all instances of the class.



In this case the school variable is a class attribute.

**7. הסברי את המושג אובייקט של מחלקה. תני דוגמא.**

A object of a class is any instance of a class, so for example, if i go and create a instance of the class Student and call is “**student1 = Student()”,** student1 is a instance of the class Student.

**8. הסברי את המושגים Constructor ו- Destructor. מה השימוש של כל אחד מהם?**

The term constructor means to build and destructor means to break down.

So in order to build a object you need to construct it. You do that with “\_\_init\_\_”.

By default you don’t need to call a deconstructor in python because it’s called by default at the end of the code, but if you want, you can call it with the ‘\_\_del\_\_’.

**9. הסברי את ה- keyword / מושג self. מה השימוש שלו?**

Keywords are the words that have special meaning in python (and, or, not, pass, self…)

Self, is a kind of keyword and it’s a magic word that refers to each instance individually even if they’re called at the same time.

**10. מהי ירושה? כיצד ומדוע נשתמש בה?**

Inheritance is when you inehret attributs from a class so if you have a class that has a certain property and you would like to use that property in a different place, you can inherit it.

**11. הסברי את המושג Polymorphism. מדוע נרצה להשתמש בו?**

The term polymorphism means many forms, and in coding it refers to methods, functions and operators that have the same name and can be used on many objects and classes.

**12. מהי תכונה / פונקציה סטאטית )static ? )איך היא שונה מתכונה / פונקציה רגילה? מתי נרצה להשתמש בstatic ?איך נגדיר תכונה סטאטית ופונקציה סטאטית? תני דוגמא.**

A static method is a method that has something to do with the class but doesn’t actually use the cls (class) keyword (\*it doesn’t change things in the class). And that’s different from a regular method because a regular class method is very specific to the class and is dependant on the class.

Our general guideline for using a static method is when we don’t want to change anything in the class but what we’re trying to work with belongs in the class.

The way we declare class methods and static methods is with the **@classmethod** and **@staticmethod.**

