

**Q1. What is the relationship between classes and modules?**

Answer : Classes can be saved into separate file, that file is called module. This files can be imported in any number of programs you want to use it in.

**Q2. How do you make instances and classes?**

Answer : Creating instances :

For creating a class instance, we call the class by its class name and pass the arguments it's init method accepts.

E.g. `class_instance=class1("abc",123)`. Here `class_instance` is class instance of `class1` with attributes "abc" and 123.

Creating classes:

"class" keyword creates a class. class keyword is followed by classname followed by a colon.

E.g. `class Person :` , this creates a class named "Person".

**Q3. Where and how should be class attributes created?**

Answer : Class attributes belong to the class itself they will be shared by all the instances. Such attributes are defined in the class body parts usually at the top.

class Person:

```
    kind= 'homo_sapiens' #this is class attribute
    def __init__(self, name, surname, year_of_birth):
        self.name = name
        self.surname = surname
        self.year_of_birth = year_of_birth
```

**Q4. Where and how are instance attributes created?**

Answer : Instance attributes are not shared by objects. Every object has its own copy of the instance attribute (In case of class attributes all object refer to single copy).

class Person:

```
    kind= 'homo_sapiens' #this is class attribute
    def __init__(self, name, surname, year_of_birth):
        self.name = name
        self.surname = surname
        self.year_of_birth = year_of_birth
```

`alec = Person("Alec", "Baldwin", 1958)`

`joy= Person("joy","Hobs", 1962)`

alec and joy (both are instances of class Person) have there different attributes as ("Alec", "Baldwin", 1958) and ("joy","Hobs", 1962) called instance attributes.

**Q5. What does the term "self" in a Python class mean?**

Answer : self is first attribute passed in `__init__(self,..)` methos and it refers to object itself.

**Q6. How does a Python class handle operator overloading?**

Answer : Python class handle operator overloading by use of special functions. This special function begin with double underscore (\_\_\_).

**Q7. When do you consider allowing operator overloading of your classes?**

Answer : When we want to have different meaning for the same operator according to the context, we use operator overloading.

**Q8. What is the most popular form of operator overloading?**

Answer : + operator is the most popular form of operator overloading,

**Q9. What are the two most important concepts to grasp in order to comprehend Python OOP code?**

Answer : classes and objects are two concepts to comprehend Python OOP as More formally objects are entities that represent instances of a general abstract concept called class