

## Activities: Classes II

1. We create a class called Person.
2. The person class has a class variable `number_of_persons`. Initially, the value is zero.
3. The constructor of the person class creates the fields `first_name`, `family_name`, and `id`. The first two are parameters of the constructor `__init__`. The `id` is set by using the class variables. The constructor also updates the `number_of_persons` field.

```
class Person:
    _number_of_persons = 0

    def __init__(self, first, family):
        self.first_name = first
        self.family_name = family
        self.id = Person.number_of_persons+1
        Person.number_of_persons += 1
```

4. The Person class needs a `__str__` dunder method that consists of an `id`, the first name, and the family name.
5. The `__repr__` dunder method is the same as the `__str__` method.
6. Create an `__eq__` dunder method that test whether two persons are the same. They are the same if they have the same `id`.
7. Verify that when a program creates several persons, the persons all have different `ids` and that the `id` of a person is the number of objects (itself included) that have been generated.
8. Write a class `Group` that models a group of persons.
9. The `Group` class needs `__str__` and `__repr__` dunder methods.
10. Write a `__getitem__` dunder method that returns the `i`-th person in a group.
11. Verify that you can use slices with a group.
12. Verify that you can pick a random person from a group.