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Python "Magic" Methods

Method 1: __init__

Description: Initialize the data members of a class when we create an object. It also contains collection of statements that are executed at the time of the object's creation.

Implementation: acts as a constructor.

```
def __init__(self, age, person):
        self.age = age
        self.name = name
```

Method 2: __str__

Description: This method represents the class object as a string. It should be defined in a way that is easy to read and outputs all the members. This method is also used as a debugging tool when the members of a class need to be checked,

Implementation:

```
def __str__(self):
        return "My name is {self.name} and I am {self.age}"
p = Person('Miguel', 20)
print(p.__str__())
```

Method 3: __lt__

Description: This method defines the behavior of the less-than operator.

Implementation:

```
def __lt__(self, other):
        int1 = ….
        Int2 = ….
        If int1 < int2:
                return "first object smaller than other"
        else:
                return "first object not smaller than other"
```

Mehtod 4: __gt__

Description: This method defines the behavior of the greater-than operator,

Implementation:

```
def __lt__(self, other):
        int1 = ….
        Int2 = ….
        If int1 < int2:
                return "first object greater than other"
        else:
                return "first object not greater than other"
```

Method 5: __sub__

Description: This magic method implements the – arithmetic operator which subtracts two different values.

Implementation: Returns a - b