Users > islam > Documents > 🐍 oop-python.py > ...

```python
 4      def __init__(self, name, age=0):
 5          self.name = name
 6          self.age = age
 7
 8      def describe(self):
 9          print(f"my name is {self.name} and my age is {self.age}")
10
11      @classmethod
12      def initFromBirthYear(cls, name, birthYear):
13          return cls(name, date.today().year - birthYear)
14
15  student1 = Student("islam", 20)
16  student2 = Student.initFromBirthYear("ahmed", 1993)
17  student2.describe()
18  student1.describe()
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**

1: Python

```
islam@islams-MacBook-Pro ~ % /Library/Frameworks/Python.framework/Versions/3.9/bin/python3 /Users/islam/Documents/oop-python.p

my name is ahmed and my age is 27
islam@islams-MacBook-Pro ~ % /Library/Frameworks/Python.framework/Versions/3.9/bin/python3 /Users/islam/Documents/oop-python.p

my name is ahmed and my age is 27
my name is islam and my age is 20
islam@islams-MacBook-Pro ~ %
```

1:51:47 / 2:41:25 · practical python object-oriented programming ›

Users > islam > Documents > 🐍 oop-python.py > 🐾 Man > ⬡ __init__

```python
class Person:
    def __init__(self, name, age):
        self.name = name
        self.age = age


    def display(self):
        return f"name is {self.name} and age is {self.age}"


class Man(Person):
    gender = 'Male'
    no_of_men = 0


    def __init__(self,name, age, voice):
        super().__init__(name, age)
        self.voice = voice
        Man.no_of_men += 1
```

heritage (handwritten annotation)

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**

1: Python   ∨   +   ⊟   🗑   ⌃

islam@islams-MacBook-Pro ~ %

```python
        Man.no_of_men += 1


    def display(self):
        string = super().display()
        return string + f" and voice is {self.voice} and gender is {self.gender}"
```

```python
        self.age = age


    def display(self):
        return f"name is {self.name} and age is {self.age}"


class Man(Person):
    gender = 'Male'
    no of man = 0
```

سرح برمجة كائنية التوجه في بايثون

```python
class Man():
    def __init__(self, name, age):
        self.name = name
        self.age = age

    def __add__(self, other):
        names = self.name + " and " + other.name
        ages = self.age + other.age
        return f"names combined are {names} and sum of ages is {ages}"

    # def __lt__(self, other):
    #     return self.age < other.age
```

```python
    def display(self):
        return f"name is {self.name} and age is {self.age}"

man = Man("islam", 20)
man2 = Man("ahmed", 30)
print(man+man2)
#print(man<man2)
```

Users > islam > Documents > 🐍 oop-python.py > ⭐ Man

```python
        names = self.name + " and " + other.name
        ages = self.age + other.age
        return f"names combined are {names} and sum of ages is {ages}"


    def __lt__(self, other):
        return self.age < other.age


    def display(self):
        return f"name is {self.name} and age is {self.age}"


man = Man("islam", 20)
man2 = Man("ahmed", 30)
# print(man+man2)
print(man<man2)
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**

1: Python

Users > islam > Documents > dunder_functions.py > Order > __str__

```python
35      def __len__(self):
36          return len(self.cart)
37
38      def __call__(self):
39          print(f"{self.customer}")
40
41      def __str__(self):
42          return f"{self.customer} bought {self.cart}"
43
44
45  order = Order(["lapttop", "monitor","mouse","sdsd"], "islam hesham")
46  print(order)
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**   1: Python

```
islam@islams-MacBook-Pro ~ % /Library/Frameworks/Python.framework/Versions/3.9/bin/python3 /Users/islam/Documents/dunder_functions.py
islam hesham bought ['lapttop', 'monitor', 'mouse', 'sdsd']
islam@islams-MacBook-Pro ~ % []
```