Object Orientation

October 17, 2018

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In [8]: import datetime
        year = datetime.datetime.now().year

In [21]: name = 'James'
         birth_year = 1972

         def introduce(name, age):
             return f'Hello! My name is {name} and I\'m {year - birth_year} years old!'

In [22]: introduce(name, birth_year)

Out[22]: "Hello! My name is James and I'm 46 years old!"

In [69]: class Person():
             def __init__(self, name, birth_year):
                 self.name = name
                 self.birth_year = birth_year

             def introduce(self):
                 return f'Hello! My name is {self.name} and I\'m {year - self.birth_year} years

In [70]: class Runner(Person):
             def __init__(self, name, birth_year, distance):
                 Person.__init__(self, name, birth_year)
                 self.distance = distance

             def introduce(self):
                 return f'Hello! My name is {self.name} and I\'m {year - self.birth_year} years

In [71]: james = Person('James', 1972)
         frank = Runner('Frank', 1972, 10)

In [72]: print(james.introduce())

Hello! My name is James and I'm 46 years old!


In [73]: print(frank.introduce())

Hello! My name is Frank and I'm 46 years old!
I run 10 miles every day because I like to torture my body
```