

OOP Inheritance

```
In [ ]: #base class
class Person:
    def __init__(self, name, age):
        self.name = name
        self.age = age
    def who(self):
        print("I am " + self.name + " and I am " + str(self.age))

paul = Person("Paul", 48)
paul.who()
```

I am Paul and I am 48

```
In [ ]: #inherited class
class Student(Person):
    def __init__(self, name, age, course):
        super().__init__(name, age)
        self.course = course
    def study(self):
        print("I study " + self.course)

bob = Student("bob", 18, "computing")
bob.who()
bob.study()
```

I am bob and I am 18
I study computing

```
In [ ]: #inherited

class Staff(Person):
    def __init__(self, name, age, wages):
        super().__init__(name, age)
        self.wages = wages
    def pay(self):
        print("I earn £" + str(self.wages))
```

```
richard = Staff("Richard", 26, 89900)
richard.who()
richard.pay()
```

```
I am Richard and I am 26
I earn 89900
```

In []:

```
richard.study()
```

```
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AttributeError                                Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_14300\2639445617.py in <module>
----> 1 richard.study()
```

```
AttributeError: 'Staff' object has no attribute 'study'
```