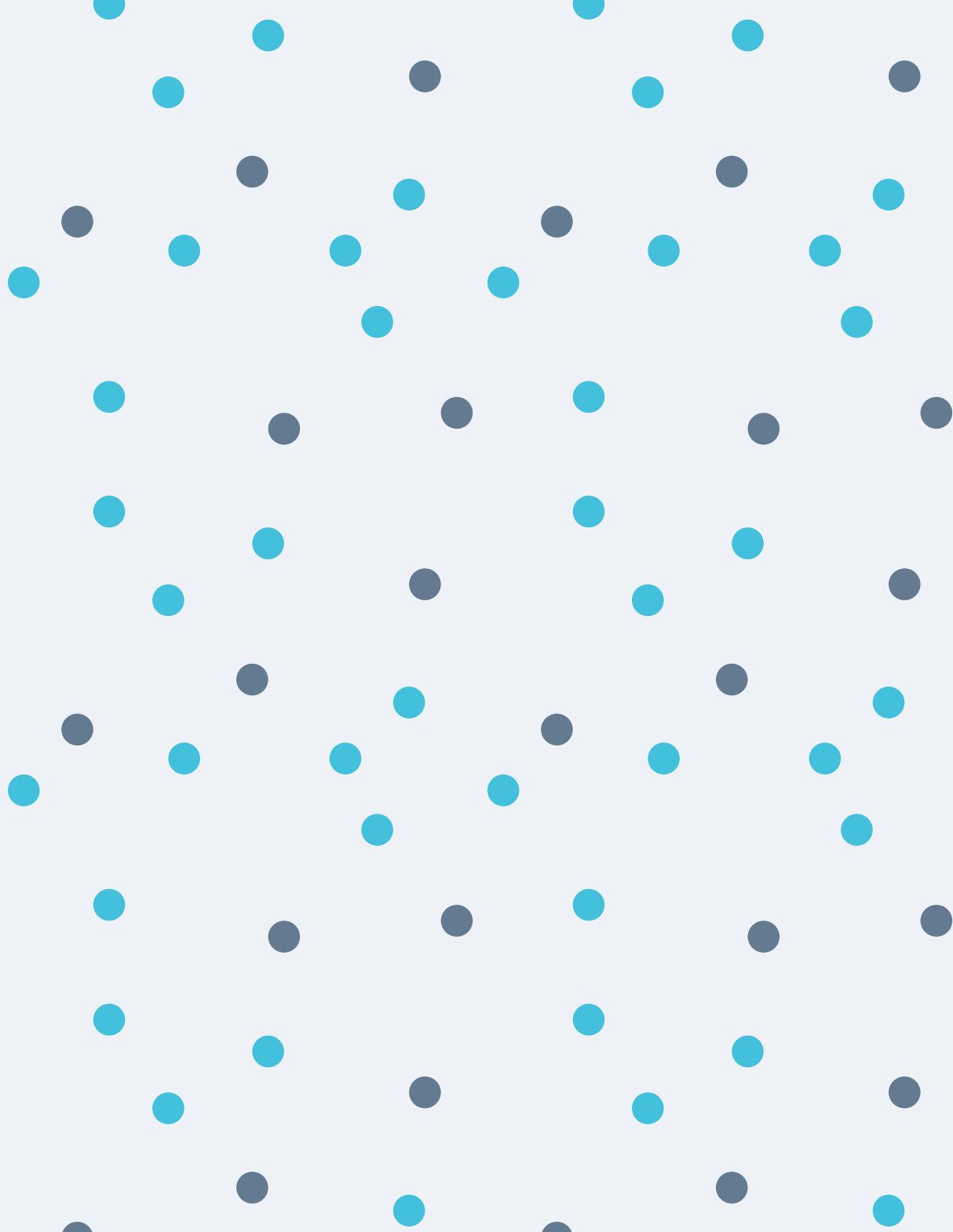


⇒ Object Oriented Programming

① Imperative Programming :

- Set of tasks
- Execute one after another

② Procedural Programming :

- We create functions.

Class → Blueprint

str, int, bool, list,

Student:

- {name, id, dob, age, contact
- (study, homework,

Bank Account

- Attributes → PIN, Name, Address, Age, Balance
- Methods → Deposit, withdraw, loan ...

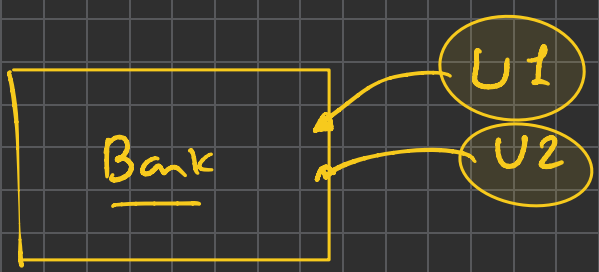
Object is an instance of class

s1 → Student()

s2 → Student():

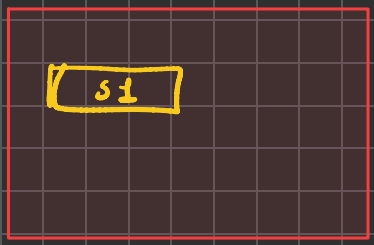
s1 and s2 distinct.

p1 = BankAcct():



Object

```
s1 = Student()
```



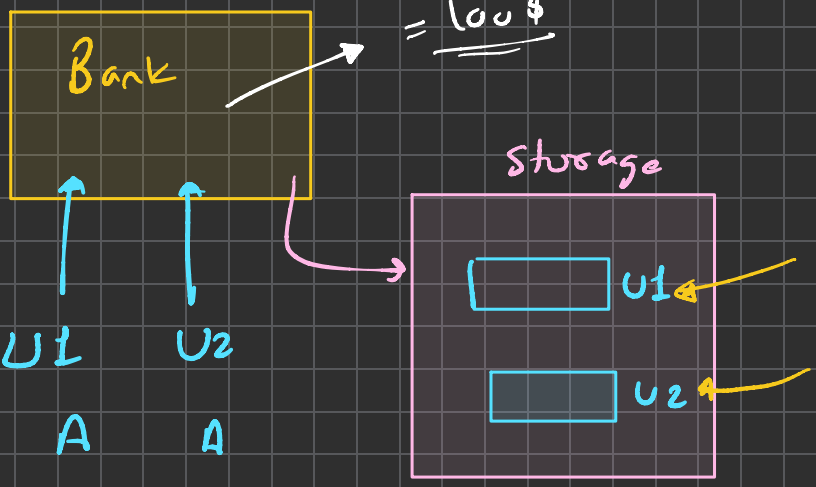
Class → No memory

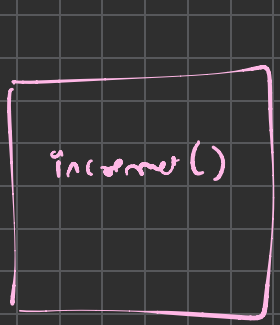
State

→ Collection of data values stored in its attributes.

Behaviour

→ Object performs actions, based on methods defined.





c = Counter()

c. increment()

Counter . increment (c)

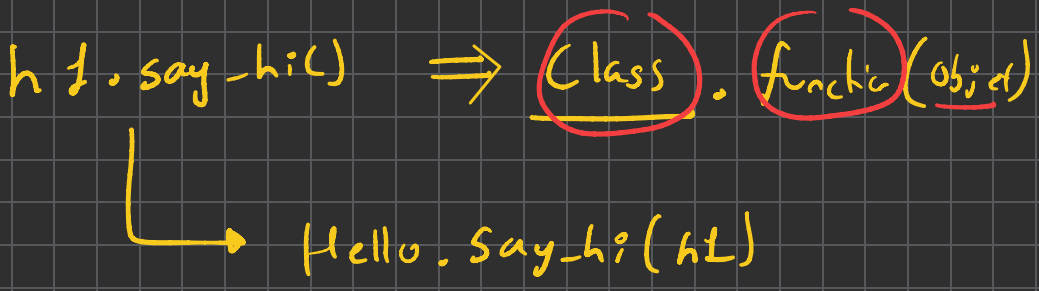
```
def increment(self):
    pass ("Inc")
```

```
class Hello :

    def say_hi(self) :
        print("Hello")

hi = Hello()
hi.say_hi()
```

→ prints Hello.


hi.say_hi()
⇒
Class.function(Object)
Hello.say_hi(hi)