

Data Science & AI & NIC - Param

Python-For Data Science

OOPs

Lecture No.- 01

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Recap of Previous Lecture



Topic

Functions 3



Topics to be Covered



Topic

Object-Oriented Programming Part -01





Topic : Object-Oriented Programming

functional /
procedural

↓
C

playing() {

}

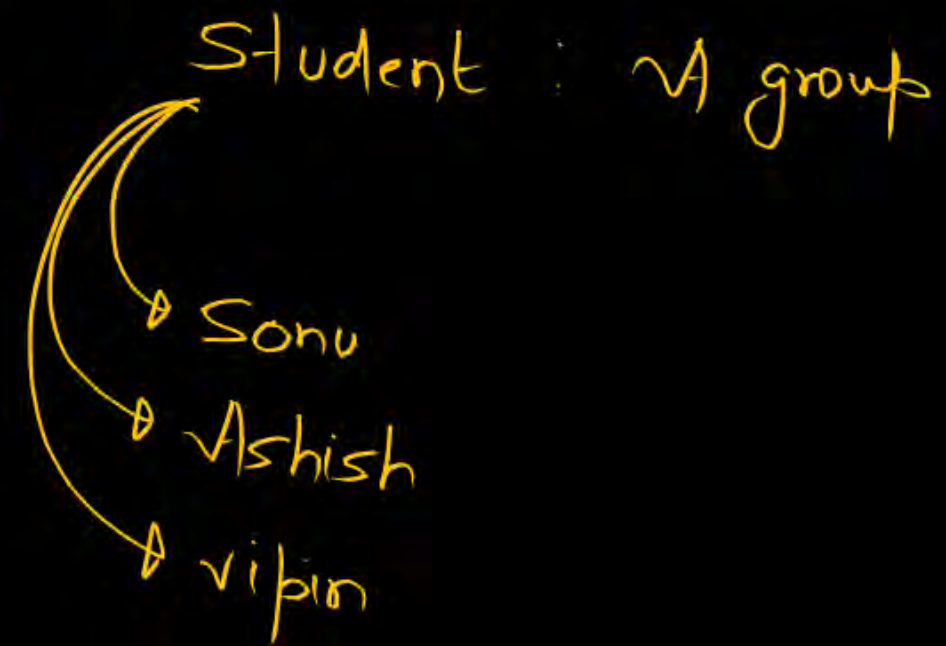
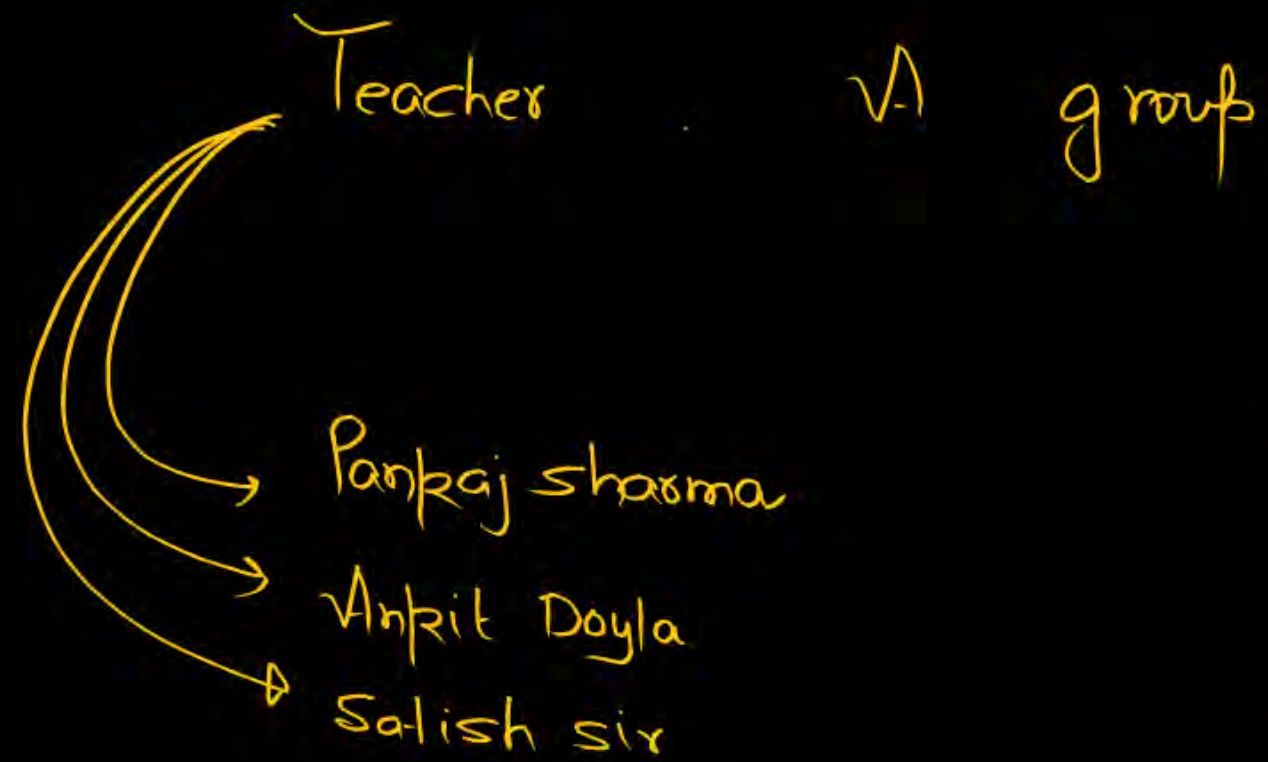
Running() {

}

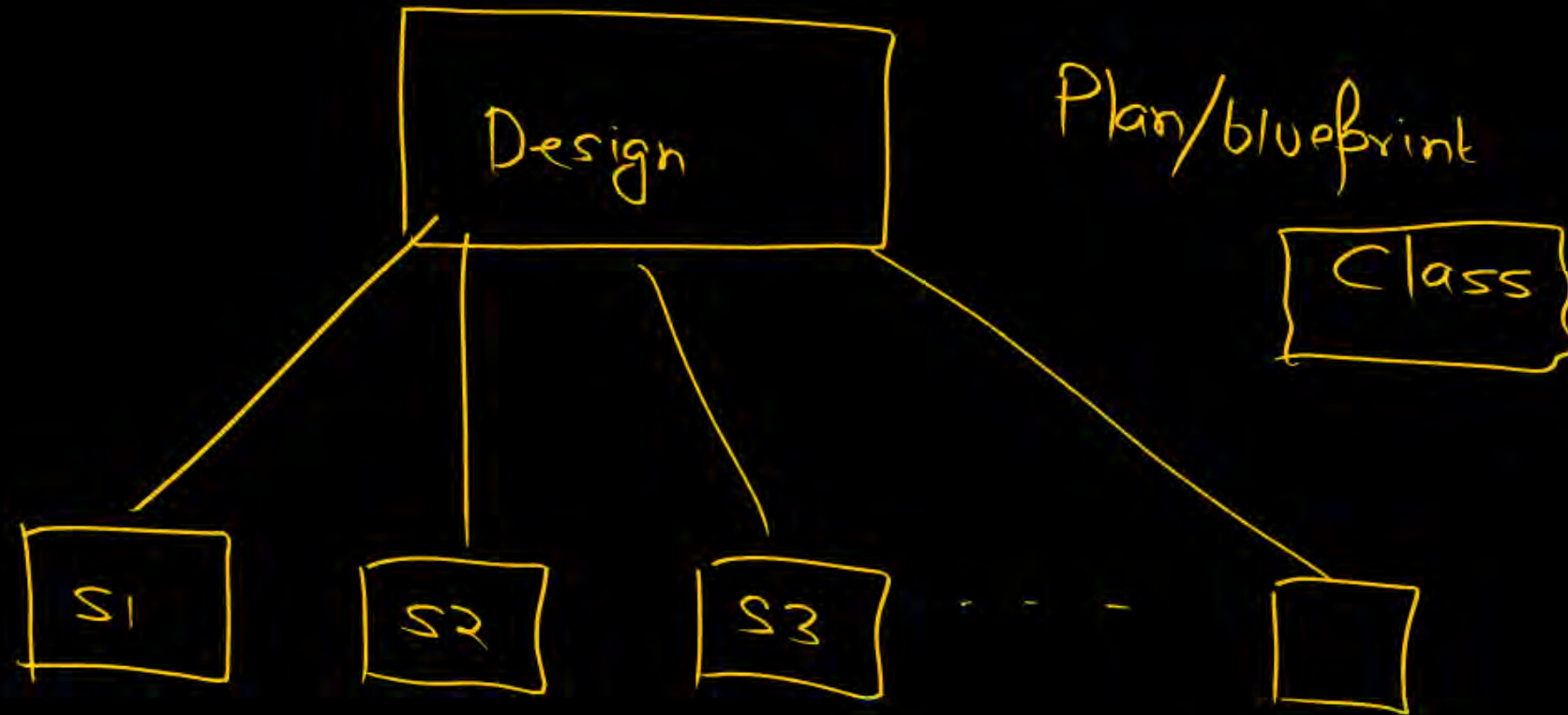
Object oriented

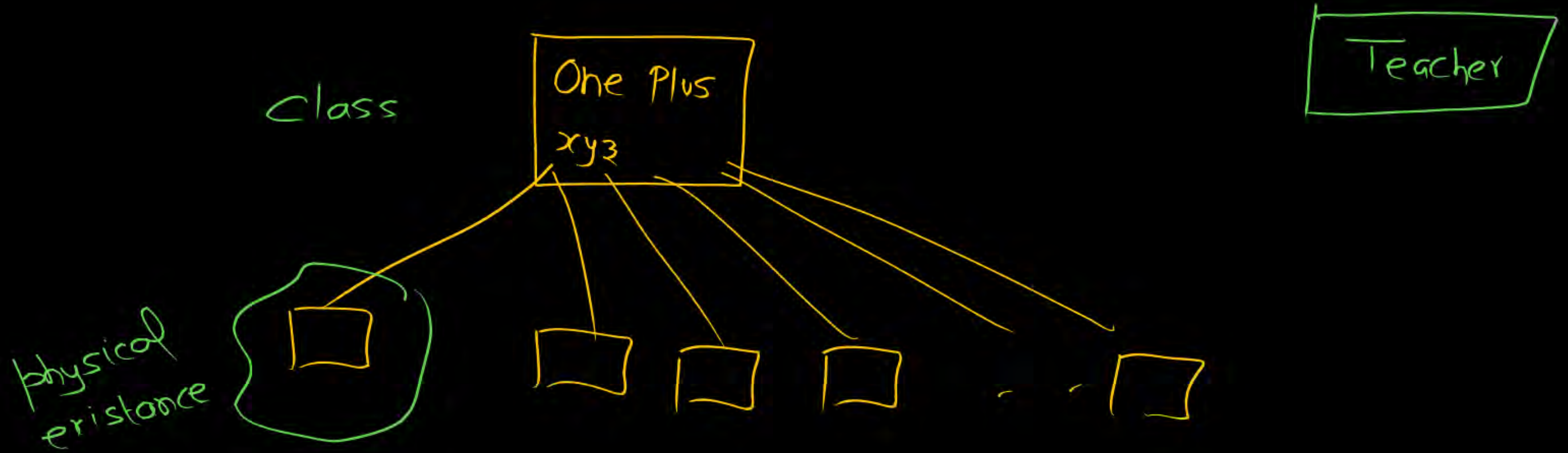
① playing()

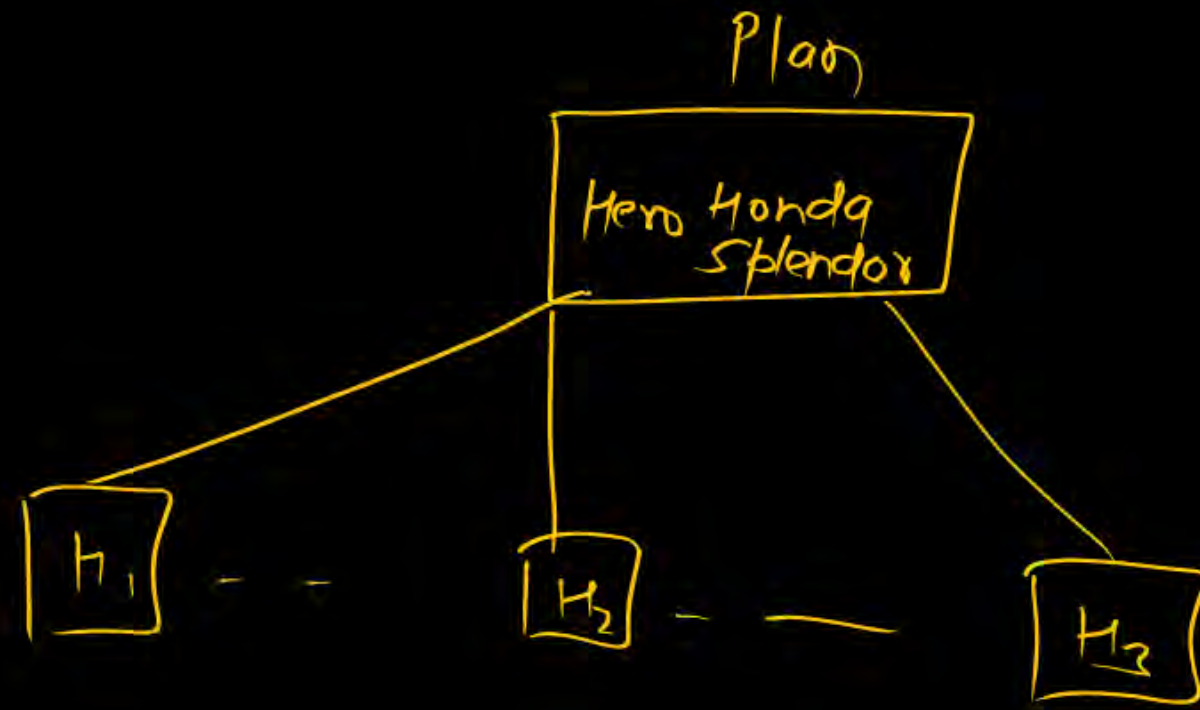
→ ② Pankaj.playing()



Maxwell xy3
Screen





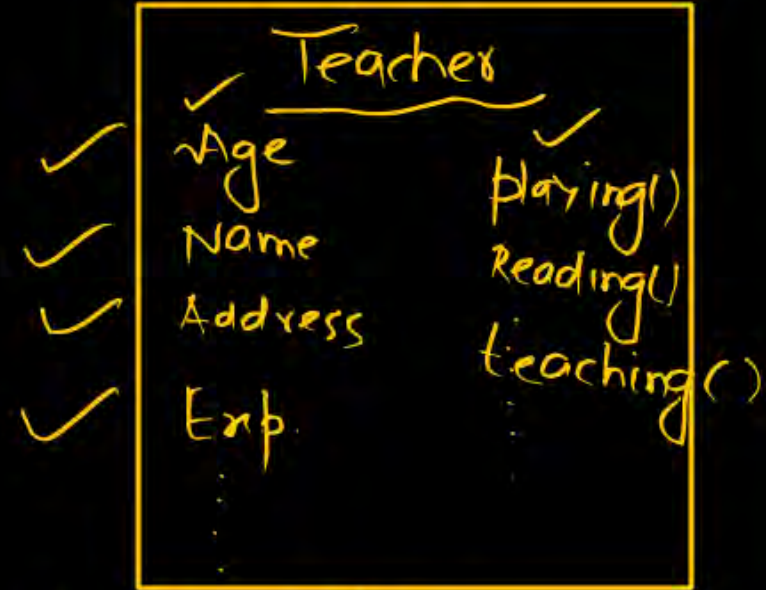


How many objects can
be created

for 1 class



Any no. of
objects

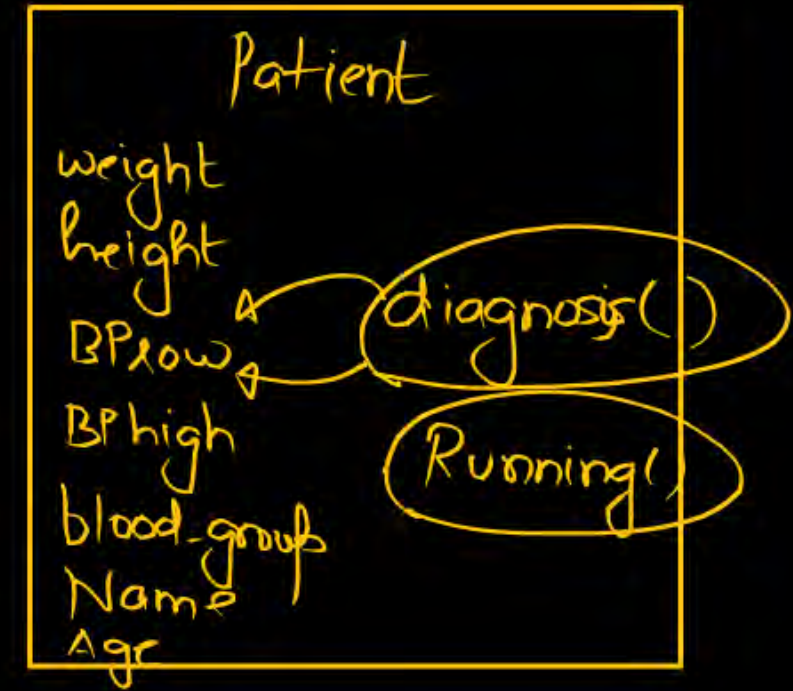


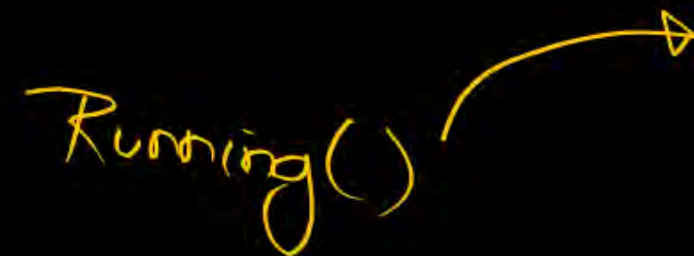
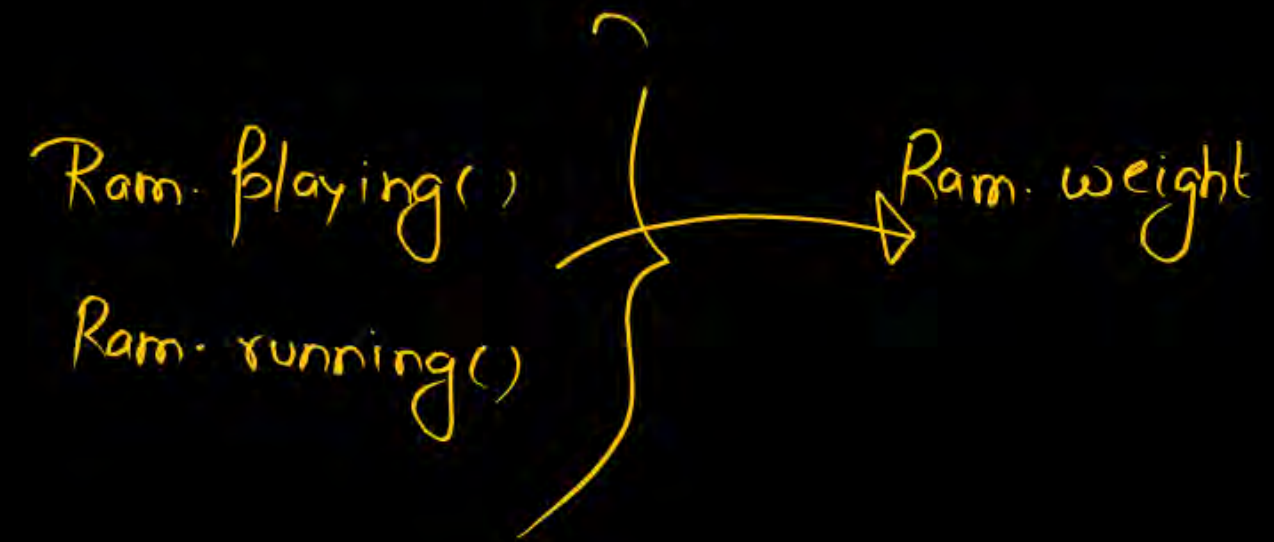
X Marital status

X Pet name

X GF

X Mom





Account

- Account_no
- Name
- Age
- Address
- Balance

Bank

Actions

Account.opening()

check_Balance()

Withdrawal()

update()

Withdrawal() → Balance

S/W

decide

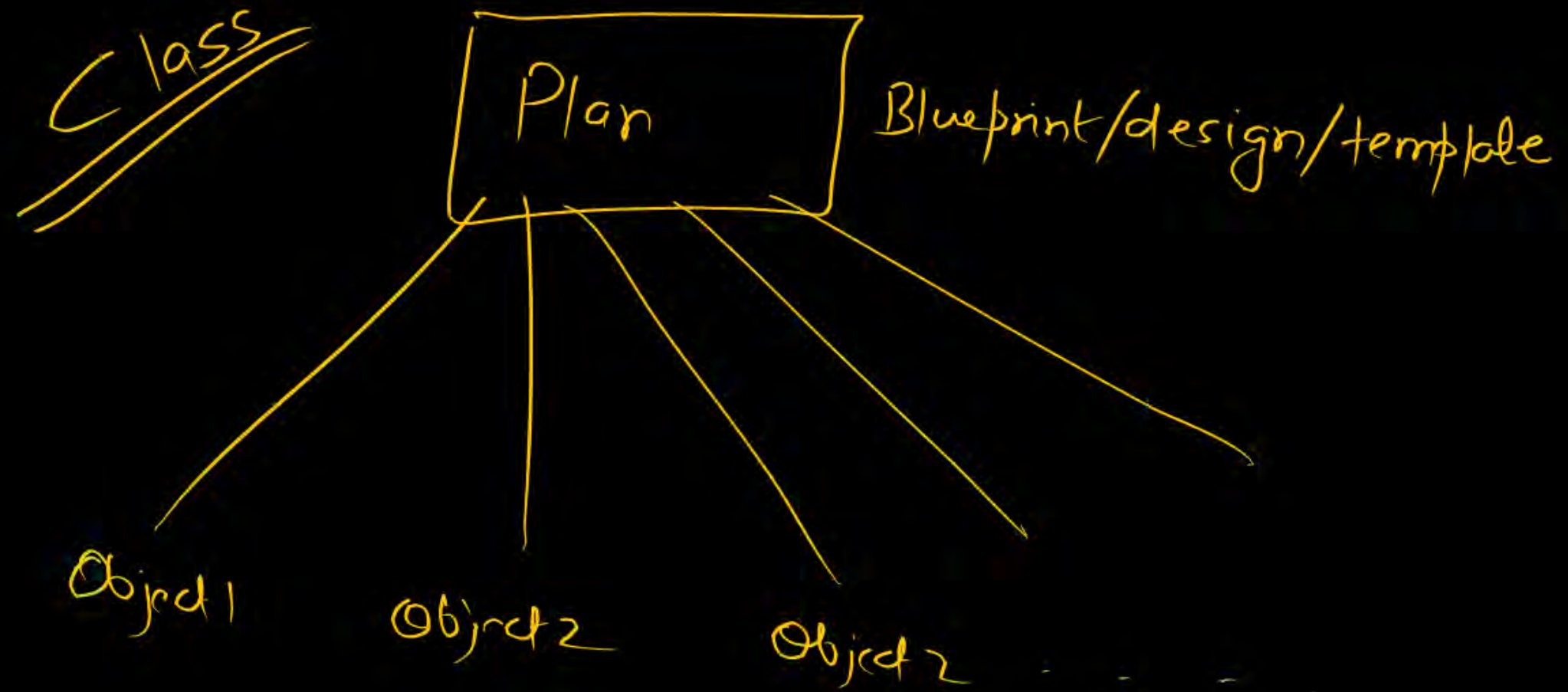
Student

few
prop

- Name
- Roll
- Age

Actions/methods

↓
thousands
of
properties



properties → variable

Actions → methods

```
class classname :
```

```
    """ Doc string """
```

```
    # variables
```

```
    # methods
```

→ 3 types

- (i) Instance variable
- (ii) static var.
- (iii) Local variable

```
class Teacher :
```

```
    """ This is my class template """
```

```
    def __init__(self):
```

```
        self.name = 'Pankaj'  
        self.Age = 41
```

```
    def display(self):  
        print(self.name)  
        print(self.Age)
```

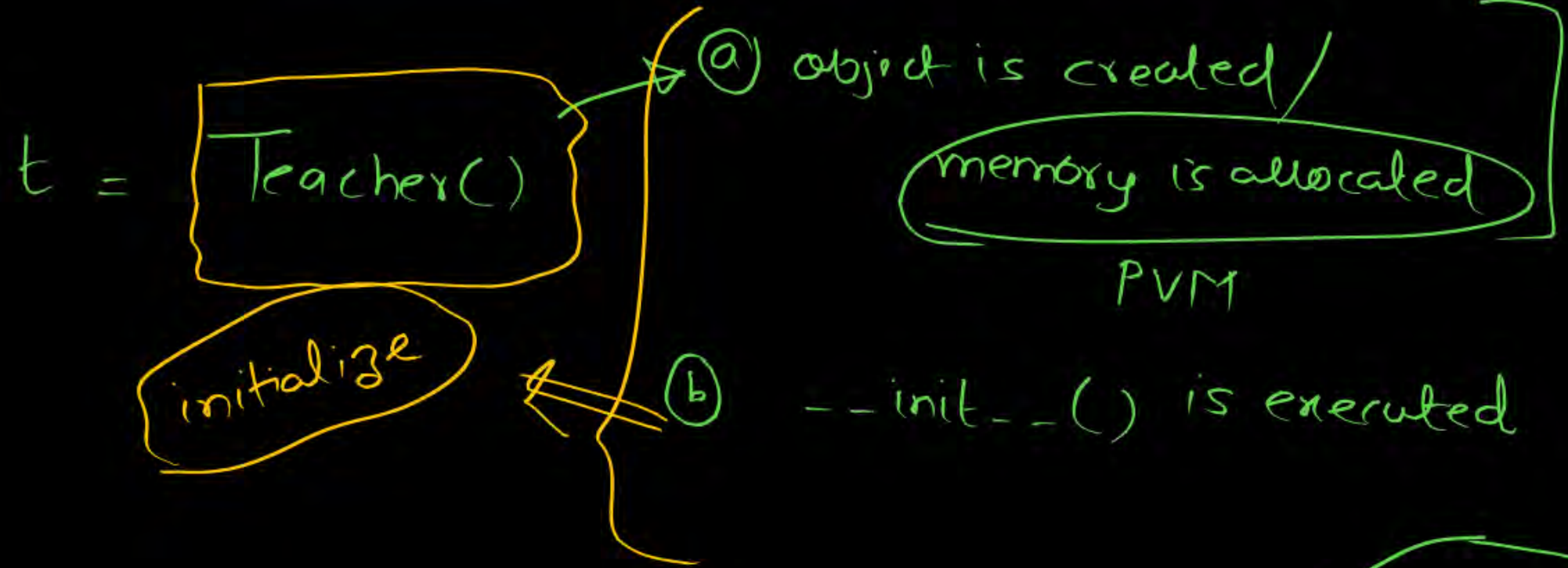
```
t = Teacher()
```

execute

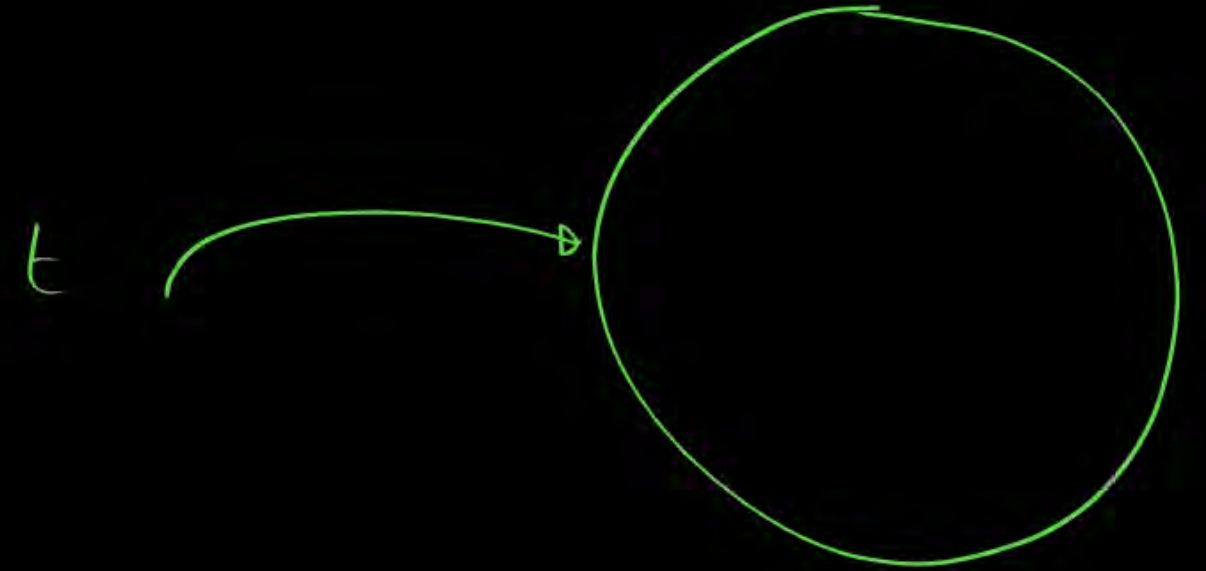
name

Age

\downarrow
 $a = 10$

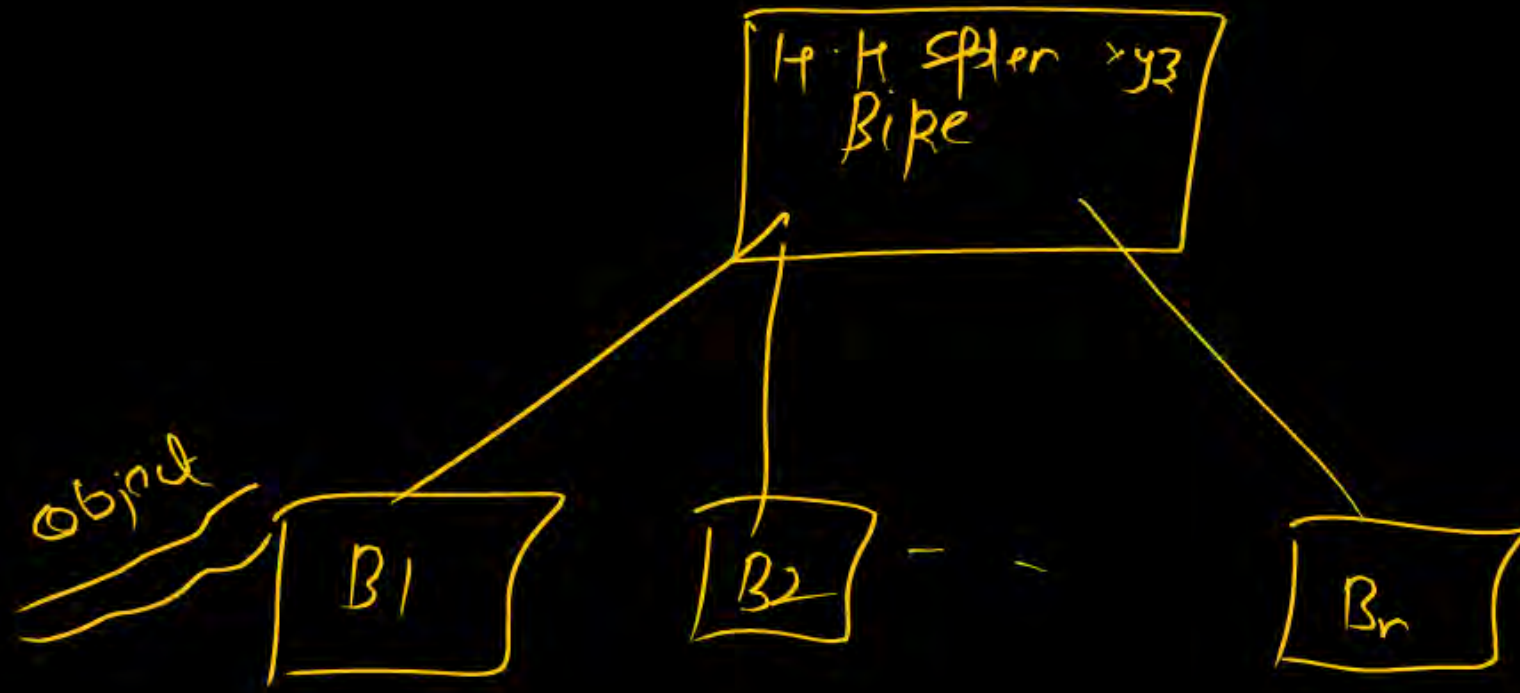


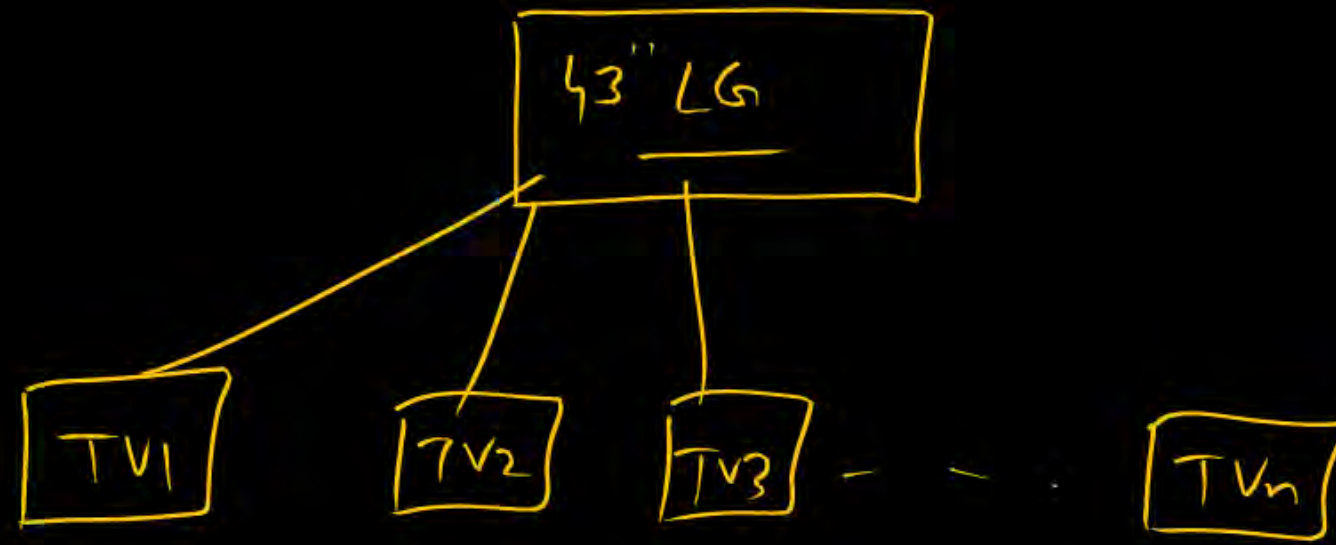
(c)



[
Object
class
reference variable
]

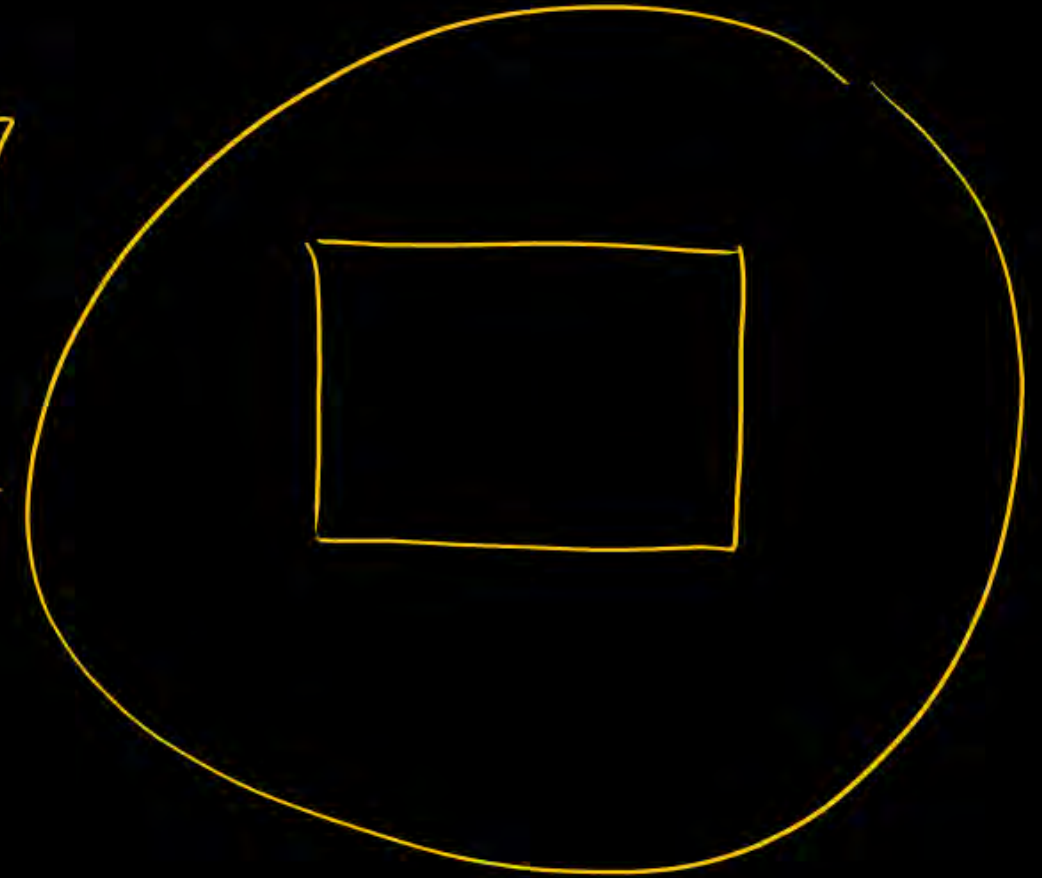
Pd1

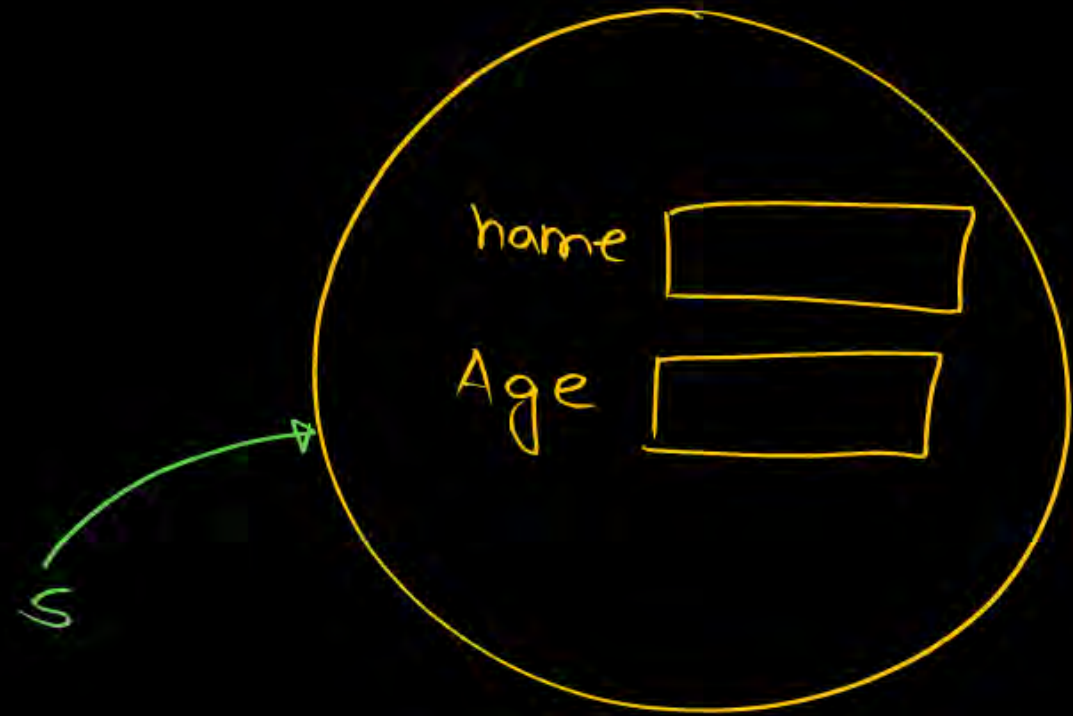




- ① object create
- ② reference variable

remote





Student()

s = Student()

THANK - YOU