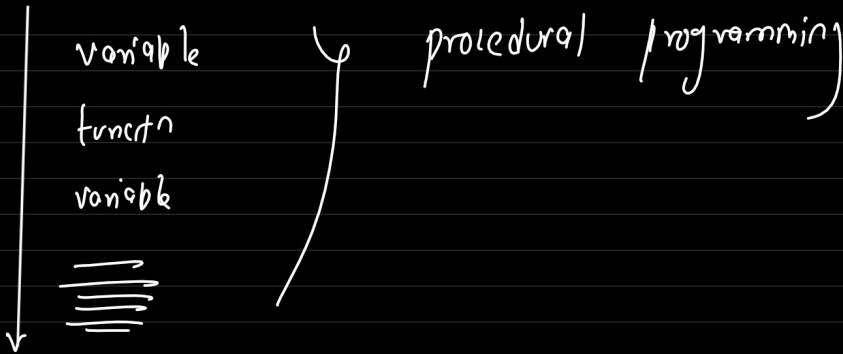


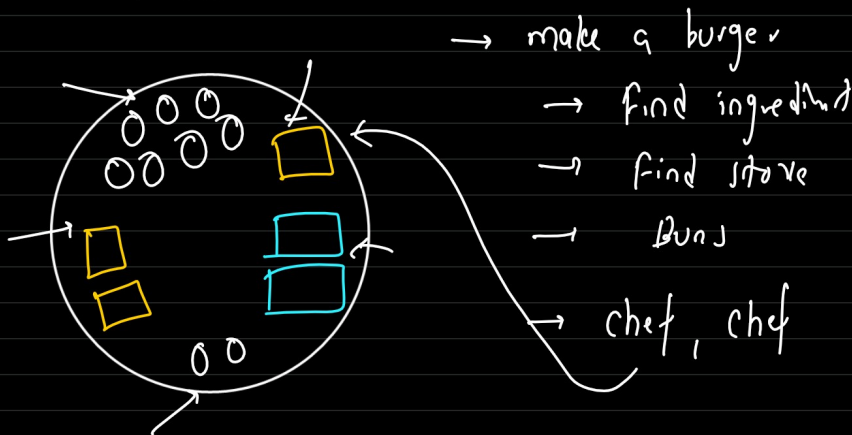
04-02-2026

Agenda:

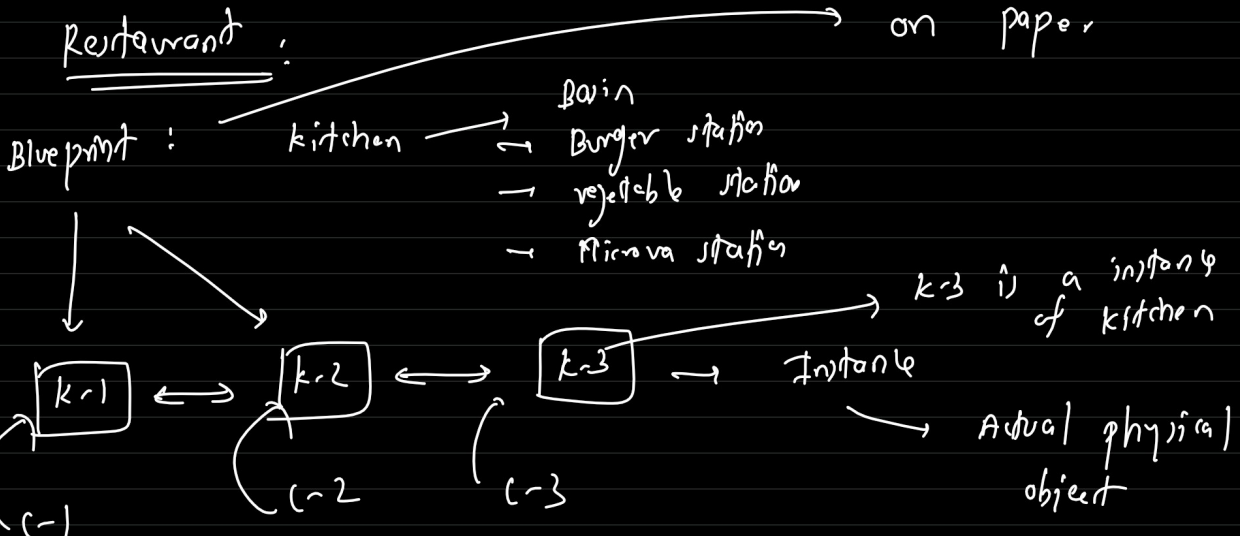
→ Object oriented programming (OOPs)

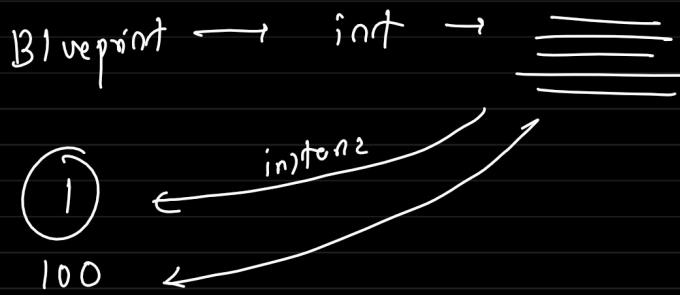


Restaurant:



Restaurant:





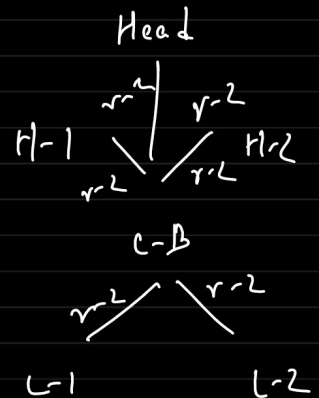
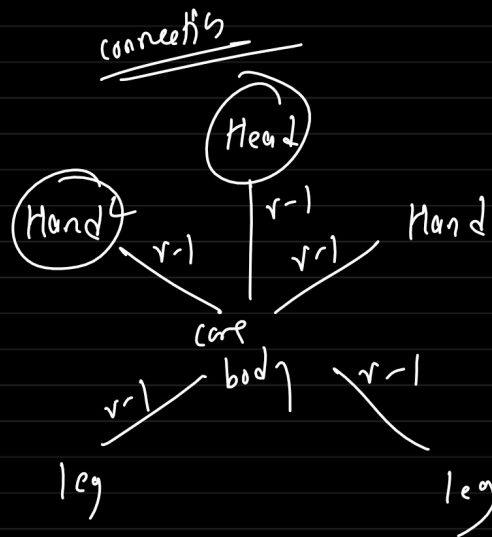
# Task: To create a robot.

procedural progr:

Task: To move 5 m

- Head
- Hand
- leg
- core body

r-1  
 → same connections



class Robot : constructor

def \_\_init\_\_ ( ) :

start → name —  
→ hands —  
→ leg —

→ auto start

initialize some  
important variables

def move ( ) :

—————  
—————  
—————  
—————

Robot

def (self) :

def (self) :

r-)

self → tell class about its own body / connection

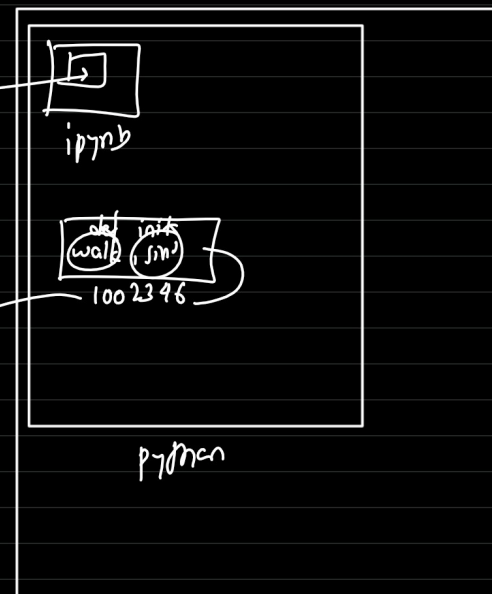
cls

————— → name ,  
—————  
—————

```
# blue print
class Robot:
    def __init__(a):
        print("Hello, welcome to robot!!")
```

```
def walk(a):
    print("Walking 10 meters.")
```

```
def sing(a):
    print("Singing a song.")
```



16 gb ram

address of 3, stored in ram

value\_1 = 3

instance of class int

value\_1 =

Robot()

↓  
class-name

os → to allocate memory for the class components

↓  
def \_\_init\_\_()

def walk() → public

def sing()

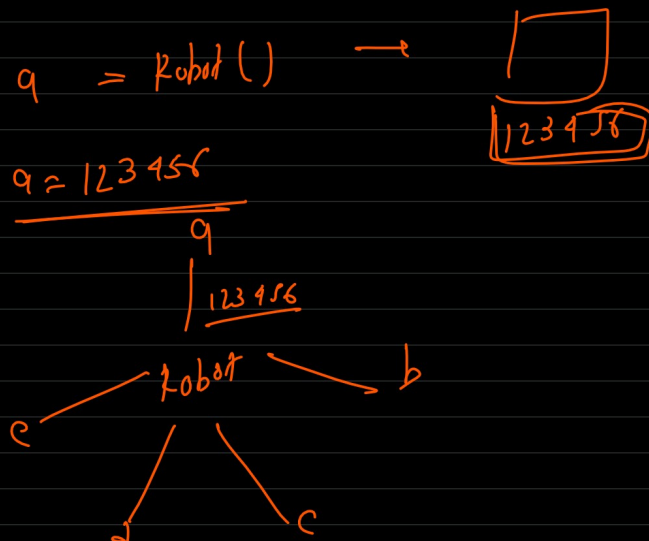
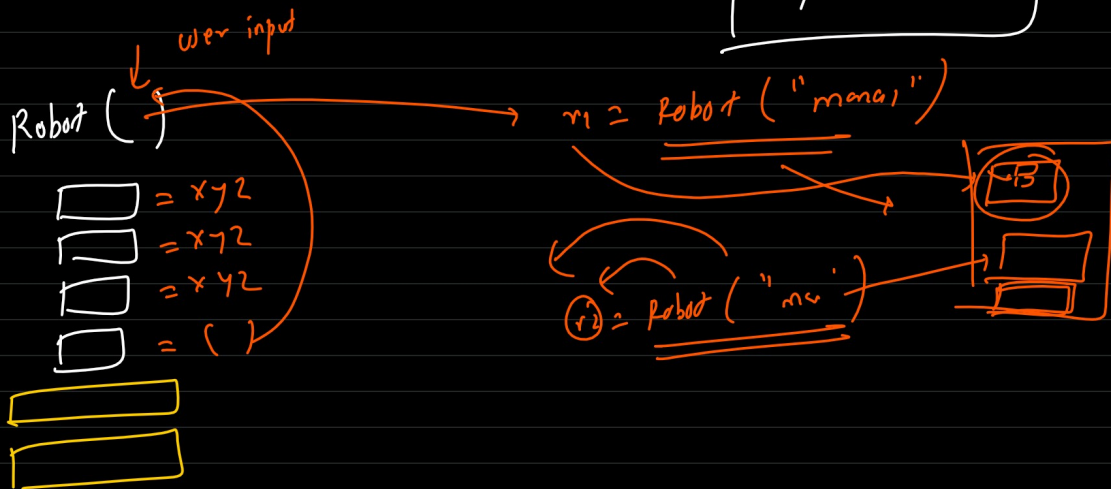
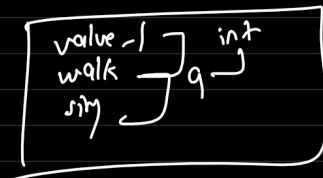
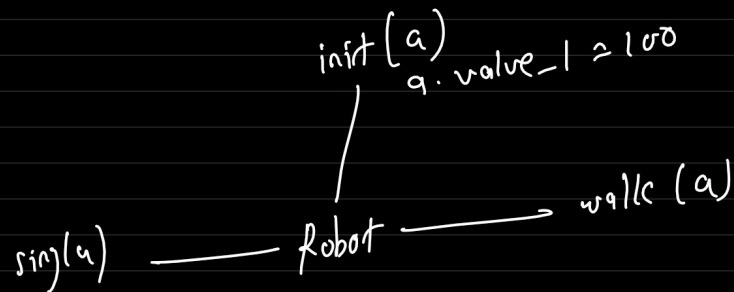
a = [1, 2, 3, 4]

object is an instance of a class

↓  
actual data / physical data stored in ram as a package

function inside a class is called as method.

$q \rightarrow \text{attribute} \rightarrow . \rightarrow \text{value / function}$



Naming convention :—

class  $\rightarrow$  Pascal case : DataScience, Robot  
method/variable : snake\_case : user\_account\_info, customer\_name