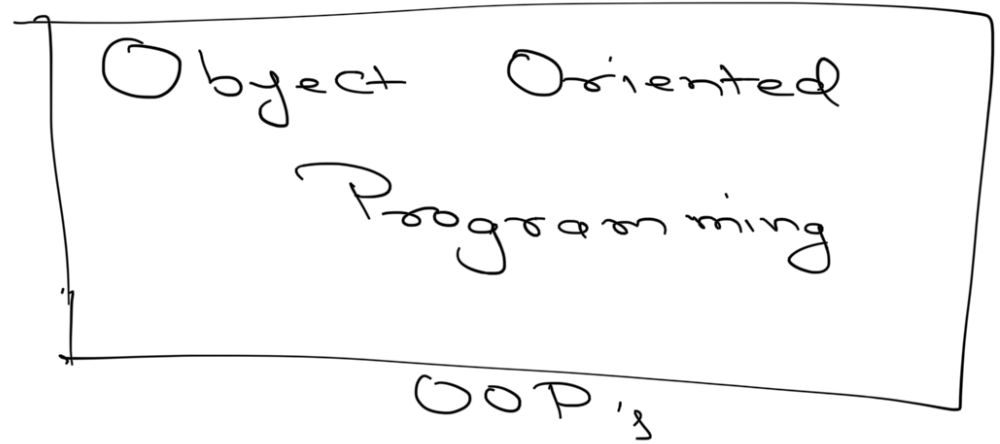


OOP Part 1

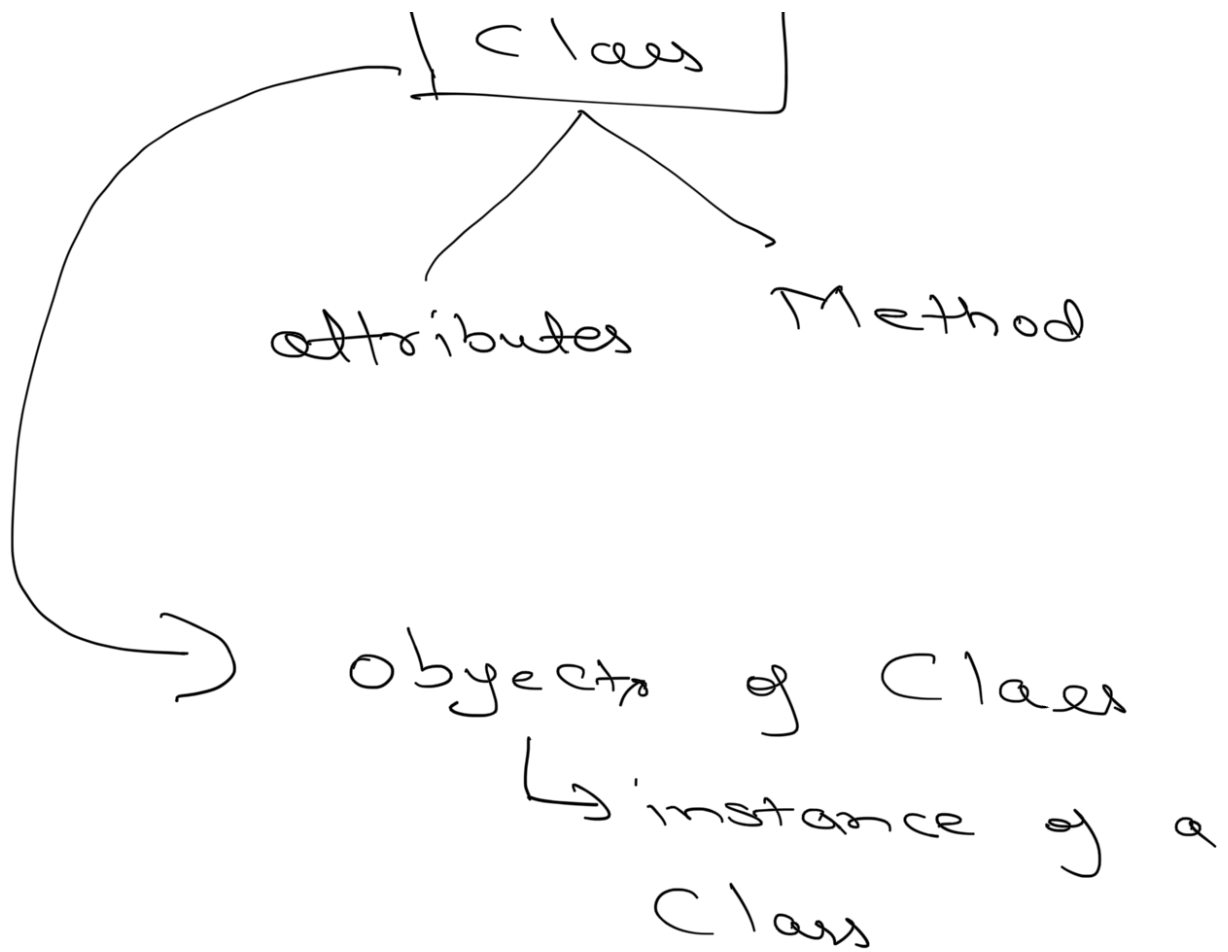


- Procedural Programming
- OOP
- Functional Programming

* Paradigm \Rightarrow Style of writing Code

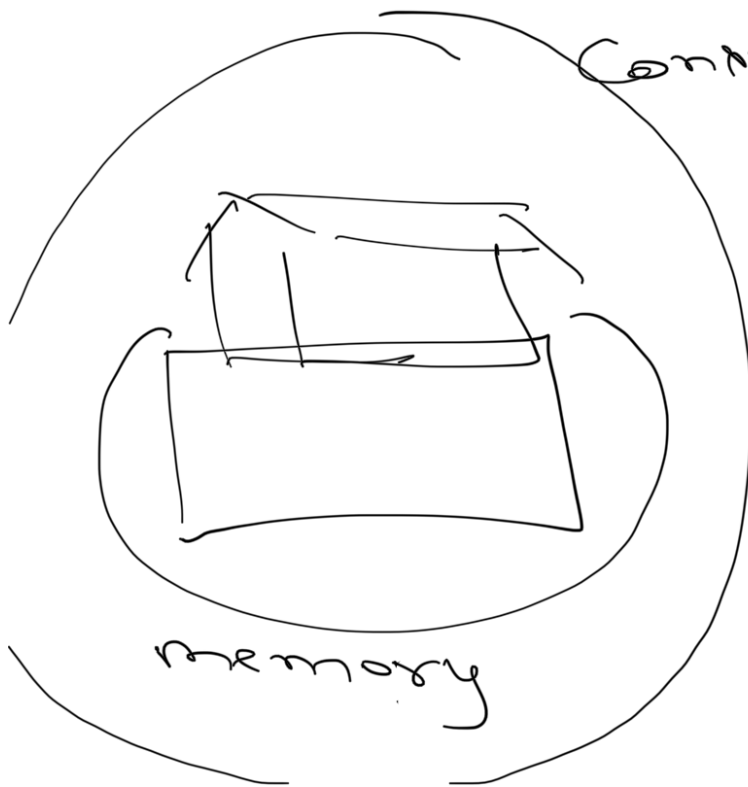
O O P



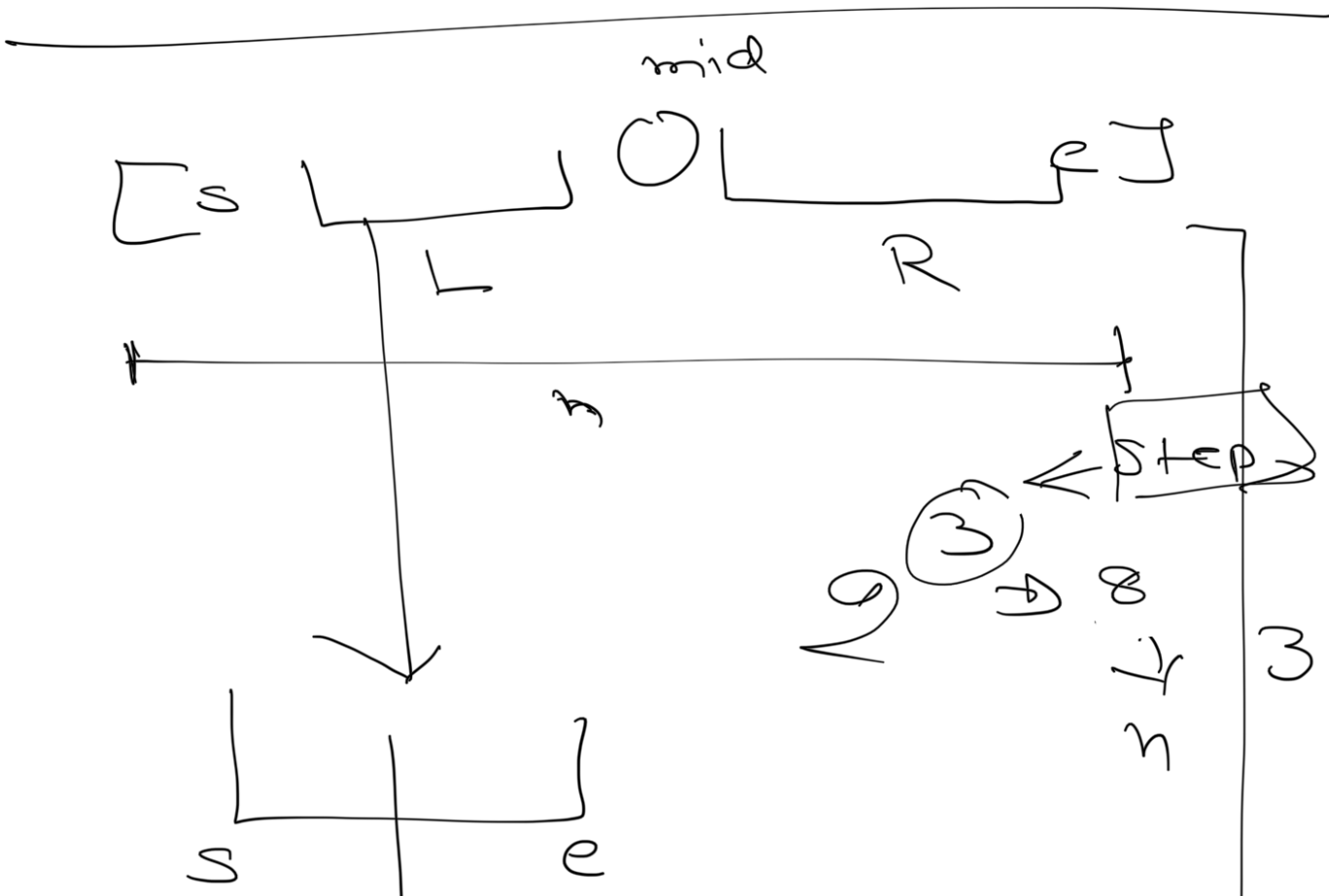


Constructor	vs	initializer
↓		
Creates the Object (assigns memory) and initialize		Only initialize Vars

Instance Vars



Constructor





$i = 1$
while $i < 5$;
 $i = i + 2$



2, 4, 16 ... - (n)

n \Rightarrow 1***2

$\log_2(n) \Rightarrow \log_2 2$

$\log_2 n \Rightarrow$ Total

$\log_2 n$
 \Rightarrow 1

$\log_2 2$
 \Rightarrow 1

Binary Search
To process n elements

2 \Rightarrow 1

$\log_2 2$ step $\Rightarrow \log_2 n$

Step $\log_2 n \Rightarrow \log n$

Step $x_1 \Rightarrow \log_2 n$