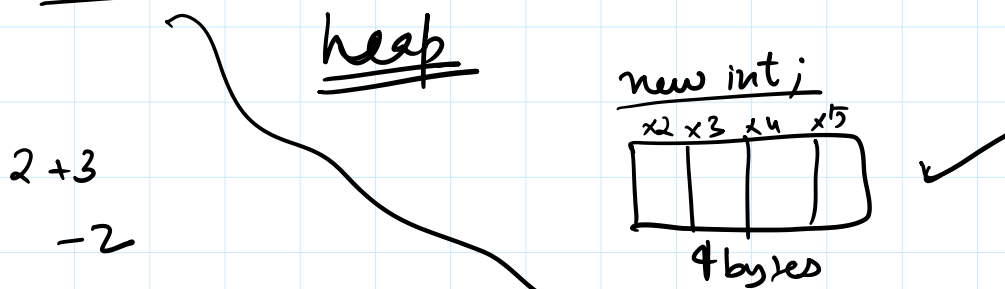


① ~~void~~ ~~void~~ <sup>set</sup> getColor (fruit f, int color) {

}

② int getColor (fruit f) {

}



int\* foo ( ) {

int\* x = new int;

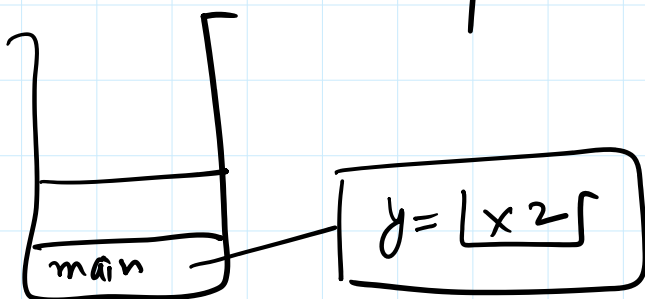
return x;

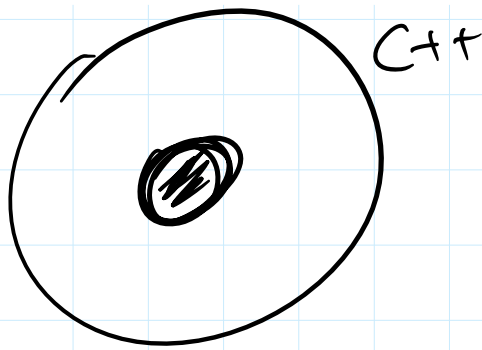
}

main () {

int\* y = foo();

}

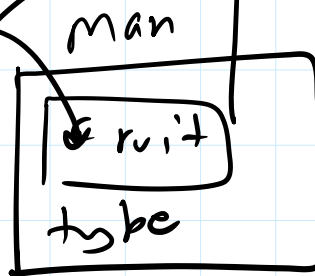
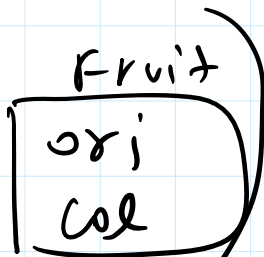




VicePrincipal

Protected:

int no of students

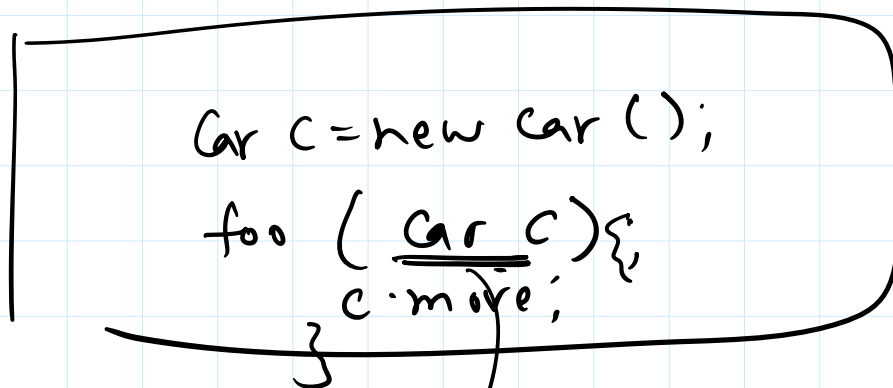


Principal

int donations;

Mango

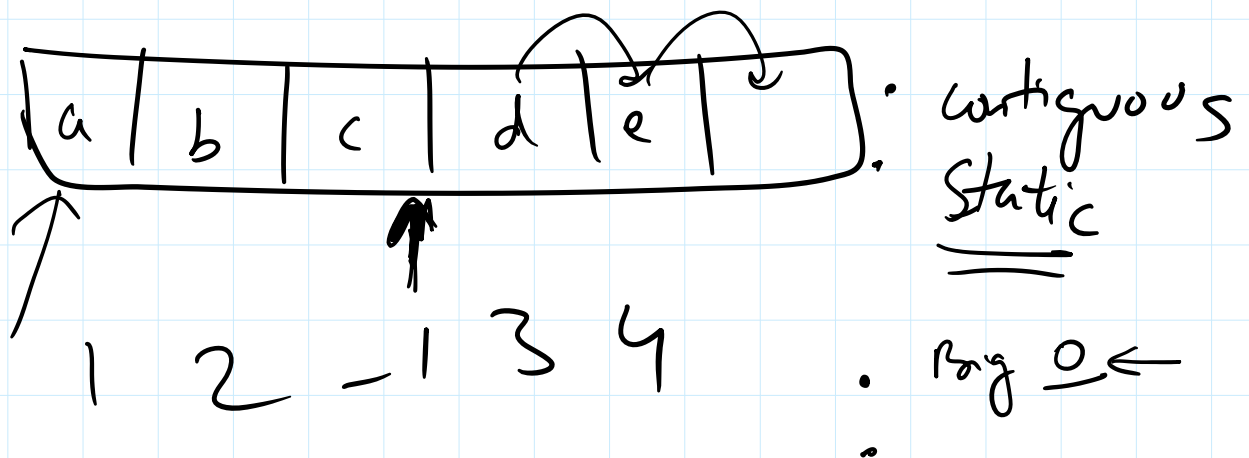
Dev



Car c =   
 ↗ new FlyCar  
 ↘ new NormalCar

Car c = new

~~car~~ fruit f = <sup>new</sup> Mango ();  
 f.get type;



- ① Search a no in array
- ① Execution time  $\xrightarrow{\text{code } x}$  time
- ② Resources — space

<div style="border: 1px solid black; width: 200px; height: 20px; margin-bottom: 5px;"></div> <div style="text-align: center;">arr</div>	100	100
	$10^4$	$10^4$
	$10^6$	$10^6$
	$10^8$	$10^8$

$T(N)$   $\propto N$

$T(N) \propto K$

$T(N) \propto N$

$N$   
 $10^2$

$T(N)$   
 $10$

$$10^4$$

$$10^8$$

$$10^{16}$$

$$10^2$$

$$10^4$$

$$10^8$$

clk/feedback