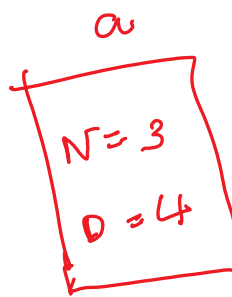
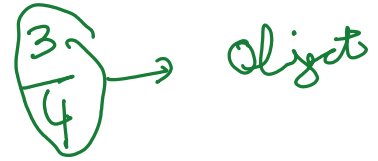
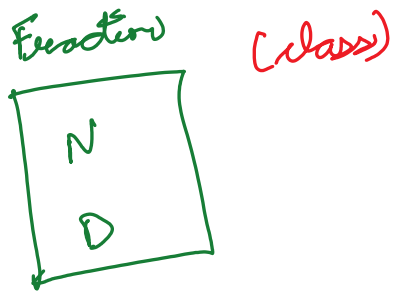


Fraction

$$\left[ \frac{N}{D} \right]$$



HCF

$$\frac{10}{2} \div \text{gcd} = \frac{5}{1}$$

$$\frac{x}{y} = \frac{5}{10}$$

gcd

2

$$\begin{aligned} \text{max HCF} &= \min(x, y) \\ \text{min HCF} &= 1 \end{aligned}$$

$$w = \text{min HCF}$$

$$\begin{aligned} N \% w &= 0 \quad (\text{gcd} = w) \\ D \% w &= 0 \end{aligned}$$

$w \rightarrow j$

$$w \geq \min \text{HCF} (x, y)$$

Simplify

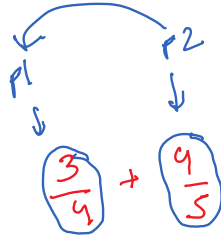
Cancel

↓

$$N = N / \text{Cancel};$$

$$D = D / \text{Cancel};$$

F1 add (F2)



F1 simplify C);

↑

meets

Denote

$N = 10$

$D = 2$

F1 add (F2);

(3/4) (4/5)

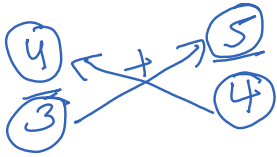
$$F1 = F1 + F2$$

F1 add (F2);

F1

$N = 10$	5
$D = 2$	1

$f1$   $add(f2);$



$$m = \frac{(4 \times 4) + (5 \times 3)}{3 \times 5}$$

$$D_{max} = 3 \times 5$$

only for  $W_i$

void  $add(Execution\ f2) \{$   
 $\quad this \rightarrow$   
 $\quad N \leftarrow$   
 $\quad D \leftarrow$   
 $\}$

$f2.nverts$   
 $N = S;$   
 $D = 10;$

$for ($   
 $\quad cont \ll a \ll endl;$   
 $\}$

$split_h()$

$p1 = p1 + p2;$

$$\frac{9}{3} + \frac{5}{4}$$

$$\Rightarrow \frac{16 + 15}{12} = \frac{31}{12}$$

add ( function f2 ) {

int fu ( int a )  
a ++ ;

780  
[ 8 ] 6  
a

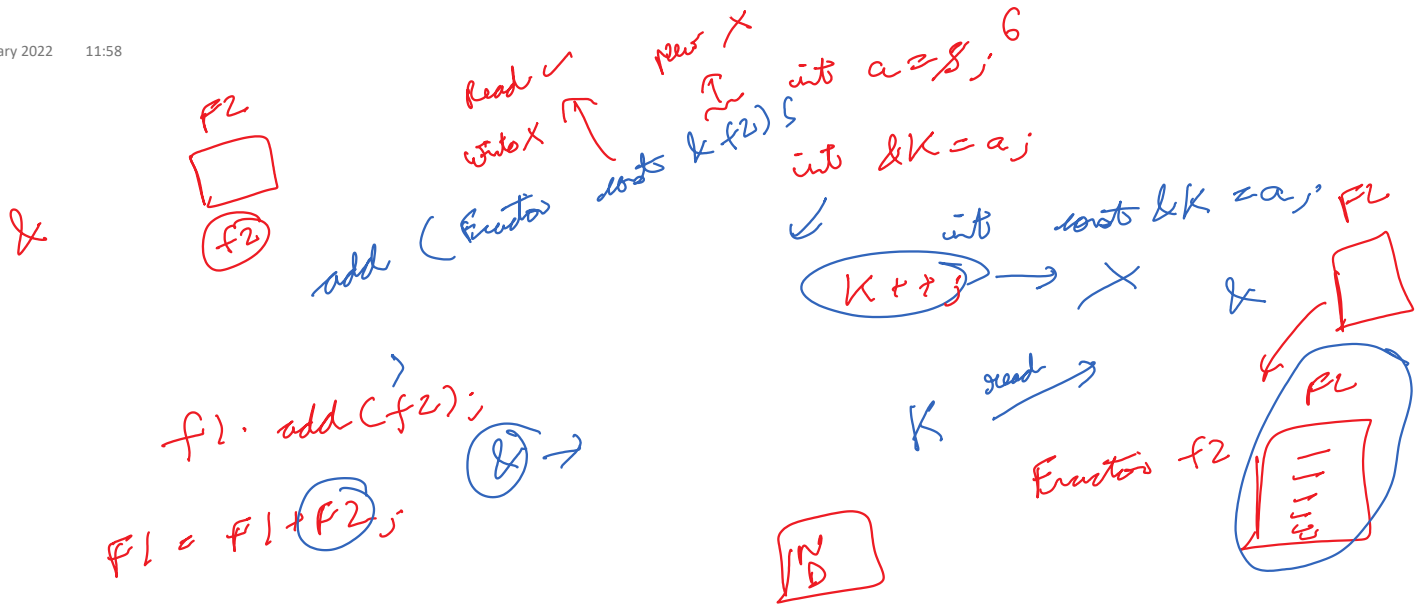
}

int a = 5;

fu ( a ) ;

800  
[ 9 ]  
a

pass by value



$$\frac{\textcircled{3}}{2} \times \frac{\textcircled{5}}{10} = \frac{3 \times 5}{2 \times 10} = \text{Simplified}$$

$$\frac{15}{40} = \frac{3}{8}$$

$$F_1 = F_1 \times F_2$$

## Complex Number

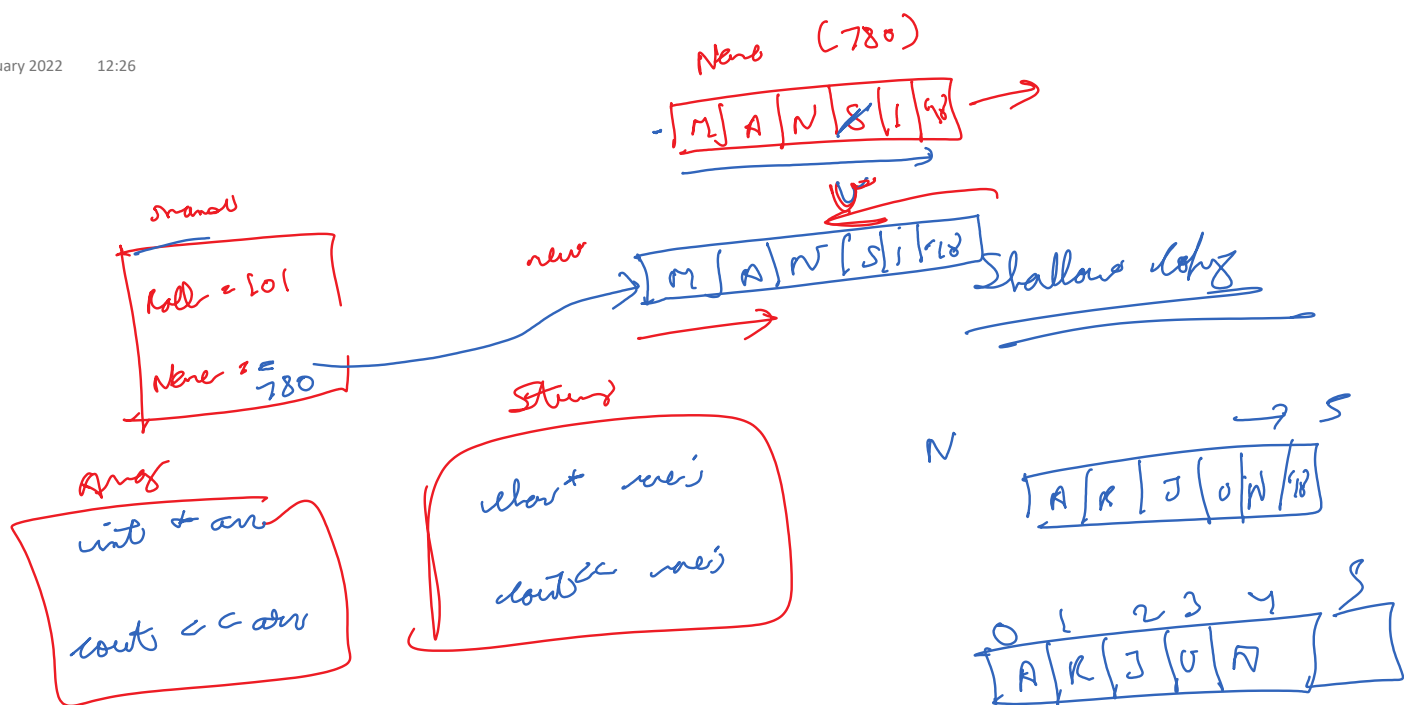
$a + ibj$   
↓                  ↓  
Real              Imaginary

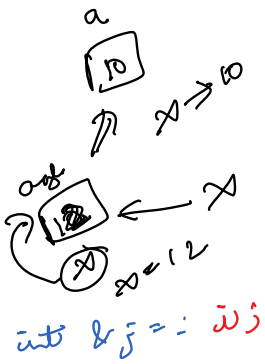
Complex {  
  real;  
  imaginary;

```
add() {  
  
}
```

```
multiply() {  
  
}
```







int &j j  
j = wj

int u = Sj

int const pu = 3.14 j

pu ++ j

pu = Sj

int const pu j  
pu = 3j



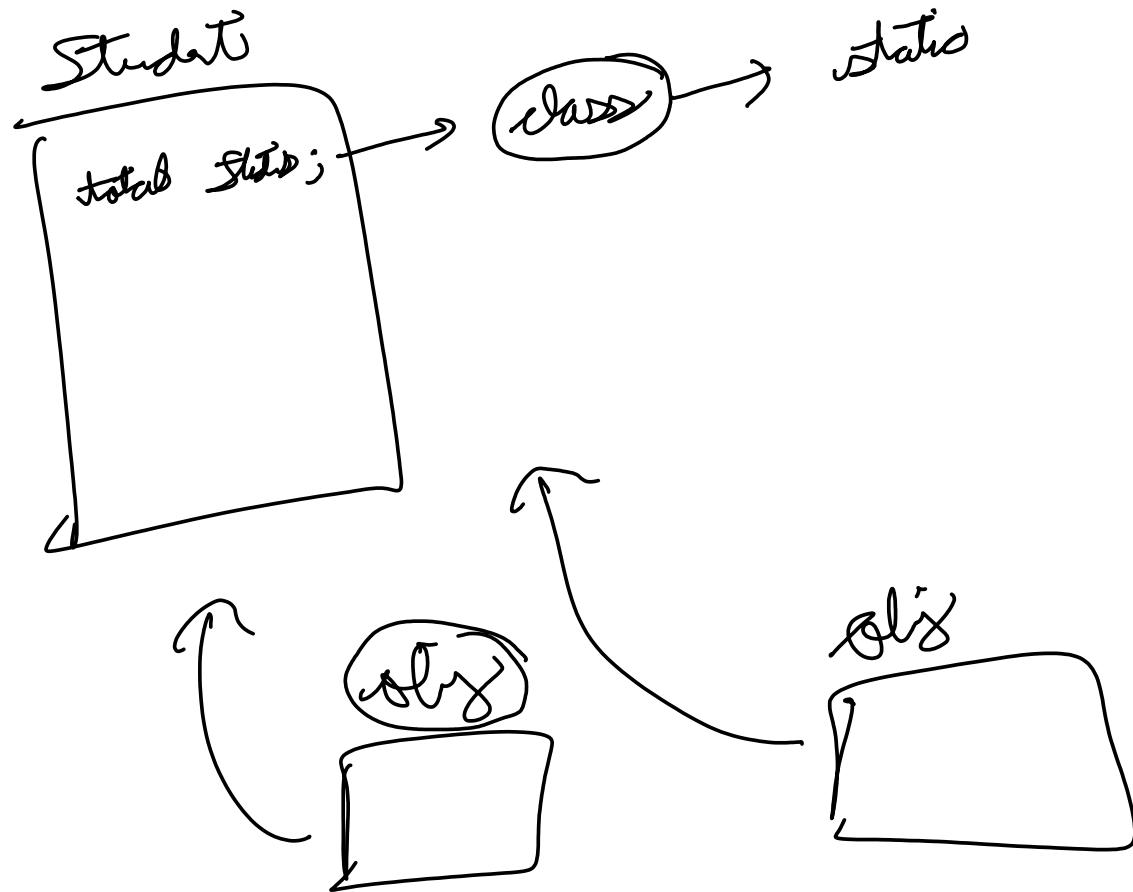
Initialization List

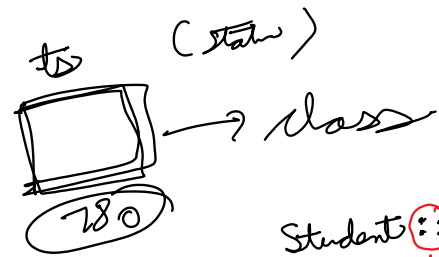
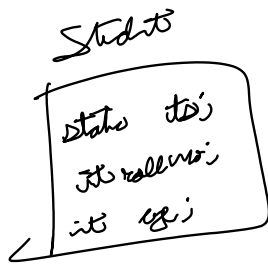
→ work before constructor  
→ work simultaneously while object creation

F  
Z  
D  
,

Cost function

$\left. \begin{array}{l} \text{Attribute } X \\ (N, D) \rightarrow X \end{array} \right\} \rightarrow \text{Cost}$   
 $\rightarrow \text{Cost function } \checkmark$   
 $\text{Non-cost function } X$





Student :: total state ;  
↓  
Scope Resolution  
photo



obj 1 roll no