

CLASS - 02 (7 MAY 2024)

$\begin{cases} 1 \\ 2 \ 3 \\ 3 \ 4 \ 5 \end{cases} \rightarrow \begin{cases} \text{var} = i \\ \text{cout} < \text{var}; \\ \text{var}++; \end{cases}$
 formula

$1^{\text{st}} \text{ loop} \rightarrow 0 \leq i < 3$
 $2^{\text{nd}} \rightarrow 0 \leq j \leq i$

i/j
 $\begin{matrix} 1 & & & \\ 2 & 1 & & \\ 3 & 2 & 1 & \end{matrix}$
 $\begin{matrix} 00 & & & \\ 10 & 11 & & \\ 20 & 21 & 22 & \end{matrix}$

Print? $\rightarrow (i+j+1)$
 $\begin{matrix} 00 \\ 10 \ 11 \\ 20 \ 21 \ 22 \end{matrix}$
 $(i+j+1)$

$1^{\text{st}} \text{ loop} \rightarrow 0 \leq i < 3$
 $2^{\text{nd}} \text{ loop} \rightarrow 0 \leq j \leq i$

$i=0$
 $i=1$
 $i=2$
 $\begin{matrix} 1 & 1 \\ 2 & 1 \\ 3 & 2 \end{matrix}$
 $(n=3)$

$\begin{matrix} 00 & & & \\ 10 & 11 & & \\ 20 & 21 & 22 & \end{matrix}$

$\begin{matrix} 1 \\ 2 \ 1 \\ 3 \ 2 \ 1 \end{matrix}$

$\begin{matrix} 00 & & & \\ 10 & 11 & & \\ 20 & 21 & 22 & \end{matrix}$

$n=3$

i^{st}

value = i ;
 value --;

$(i+j) - (j+j-1)$

Reduce

Problem

Soln $\rightarrow (5-10)$

Solution

Dubara Solve

Bookmark

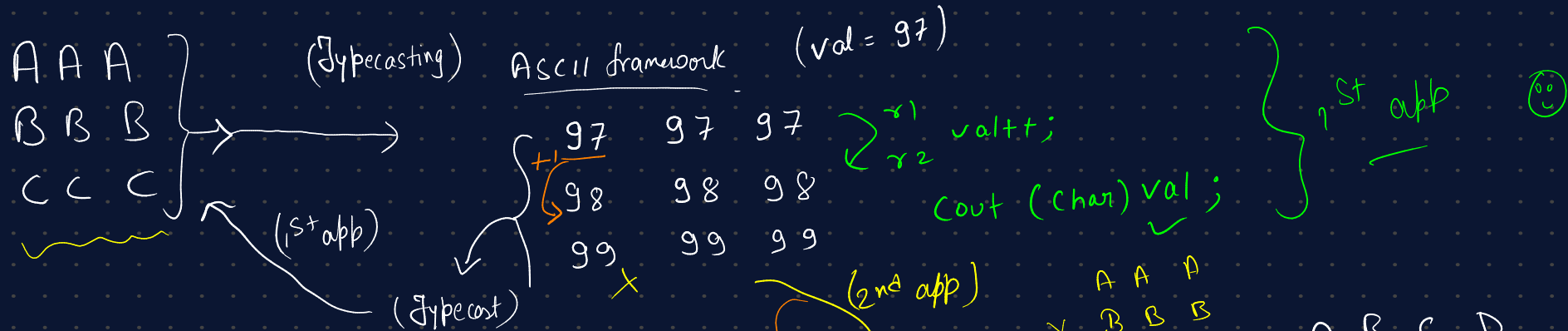
1 week Solve again

$n-i \rightarrow 3-2=1$
 $3-2=1+i \Rightarrow 3$

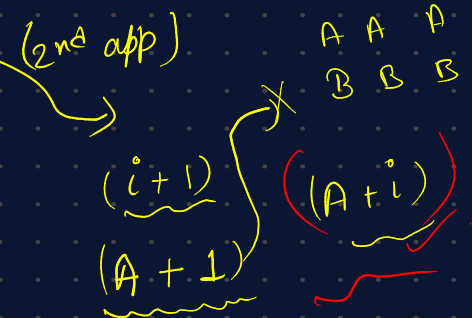
$3-0$
 $(n-j)$

$3-2=1+i \Rightarrow x$

$2+0+1=3$
 $2+1+1=2$
 $2+2-3=1$



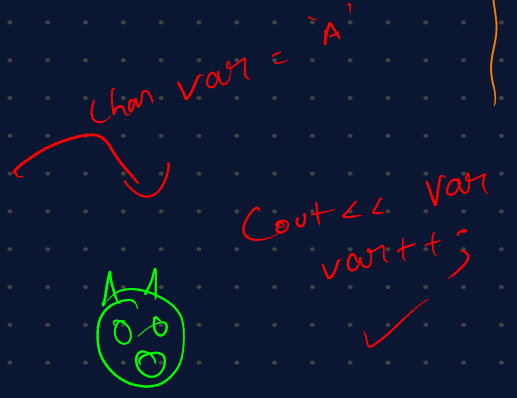
$A + 1 \rightarrow 'B'$



ABCD
 ABCD
 ABCD
 ABCD

$A + j$

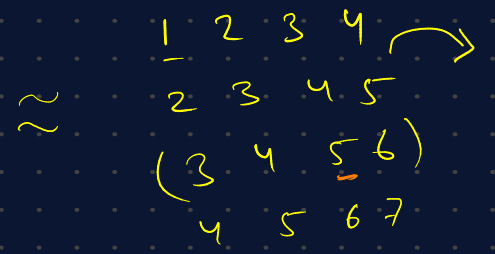
A B C D
 E F G H
 I J K L
 M N O P



$A \leftrightarrow 97$
 $(96 + i + 1 + j)$



A B C D
 B C D E
 C D E F
 D E F G

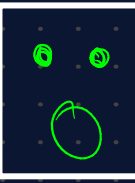


00 01 02 03
 10 11 12 13
 20 21 22 23
 30 31 32 33

- loop;
 ① $0 \leq i < 4$
 ② $0 \leq j < 4$

print typecast

$96 + 5$
 $\Rightarrow 97 + 4$
 $\Rightarrow A B C D E$



relate

$i + 1 + j$

GOOD

$96 + i + 1 + j$

$\begin{matrix} A \\ B \\ C \end{matrix} \quad \begin{matrix} B \\ C \\ C \end{matrix} \quad \left. \vphantom{\begin{matrix} A \\ B \\ C \end{matrix}} \right\} \rightarrow$

$96 + 1 \rightarrow 97 \rightarrow A$
 ① st
 $B \checkmark$
 formula alog se variable $(++) \times$

$96 + i + 1 \Rightarrow 97$
 $97 + i \rightarrow \begin{pmatrix} 00 \\ 00 \end{pmatrix}$ comp

$\begin{matrix} A \\ B \\ D \end{matrix} \quad \begin{matrix} C \\ E \\ F \end{matrix} \quad \checkmark$

Cool


14

$\begin{matrix} A \\ B \\ C \end{matrix} \quad \begin{matrix} C \\ D \\ E \end{matrix} \quad \left. \vphantom{\begin{matrix} A \\ B \\ C \end{matrix}} \right\} \rightarrow \begin{matrix} 1 \\ 2 \\ 3 \end{matrix} \quad \begin{matrix} 3 \\ 4 \\ 5 \end{matrix} \quad \left. \vphantom{\begin{matrix} 1 \\ 2 \\ 3 \end{matrix}} \right\} \rightarrow \begin{matrix} 00 \\ 10 & 11 \\ 20 & 21 & 22 \end{matrix} \rightarrow i + j + 1$

$96 + i + j + 1 \rightarrow (97 + i + j)$
 $A \rightarrow 65$
 $a \rightarrow 97$
 ASCII

$\begin{matrix} D \\ C \\ B \\ A \end{matrix} \quad \begin{matrix} D \\ C \\ D \end{matrix} \quad \left. \vphantom{\begin{matrix} D \\ C \\ B \\ A \end{matrix}} \right\} \rightarrow \begin{matrix} 4 \\ 3 \end{matrix} \quad \begin{matrix} 4 \\ 2 \\ 3 \\ 1 \end{matrix} \quad \begin{matrix} 4 \\ 3 \\ 2 \\ 1 \end{matrix}$

$n = 4$
 $\begin{matrix} 0 & 1 \\ C & D \end{matrix} \quad \begin{matrix} 0 & 0 \\ 1 & 0 \end{matrix} \quad \begin{matrix} 1 \\ 1 \end{matrix}$
 $\begin{matrix} 20 & 21 & 22 \\ 30 & 31 & 32 & 33 \end{matrix}$

visually check Jabardasti

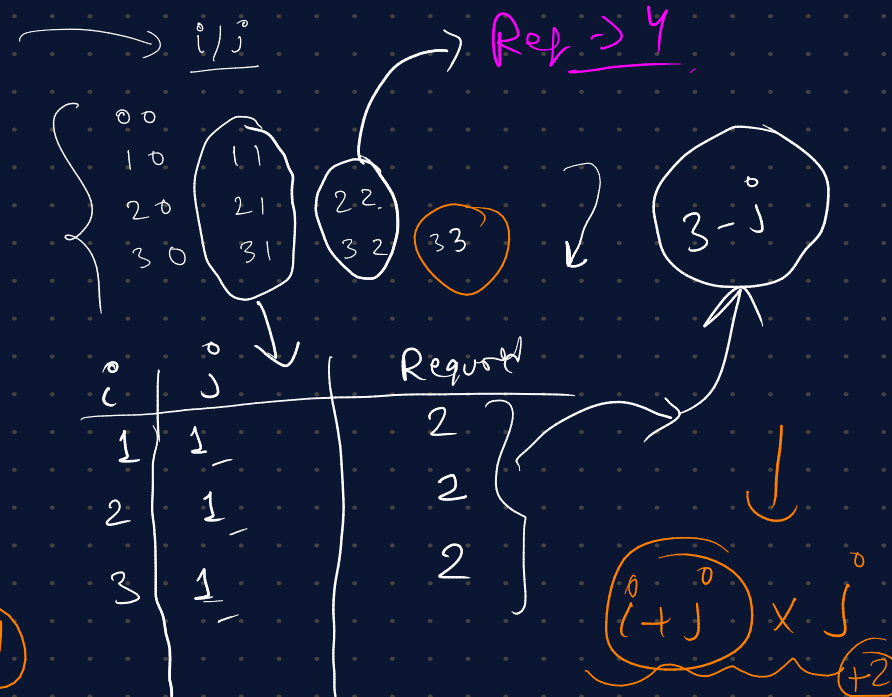
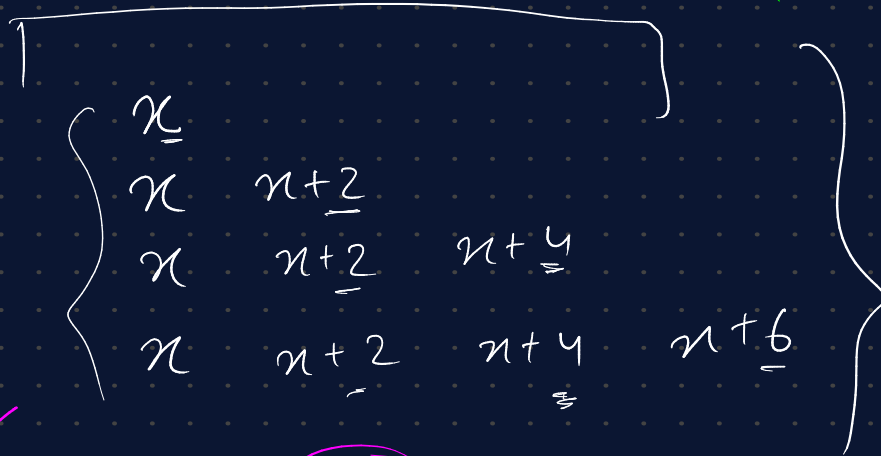
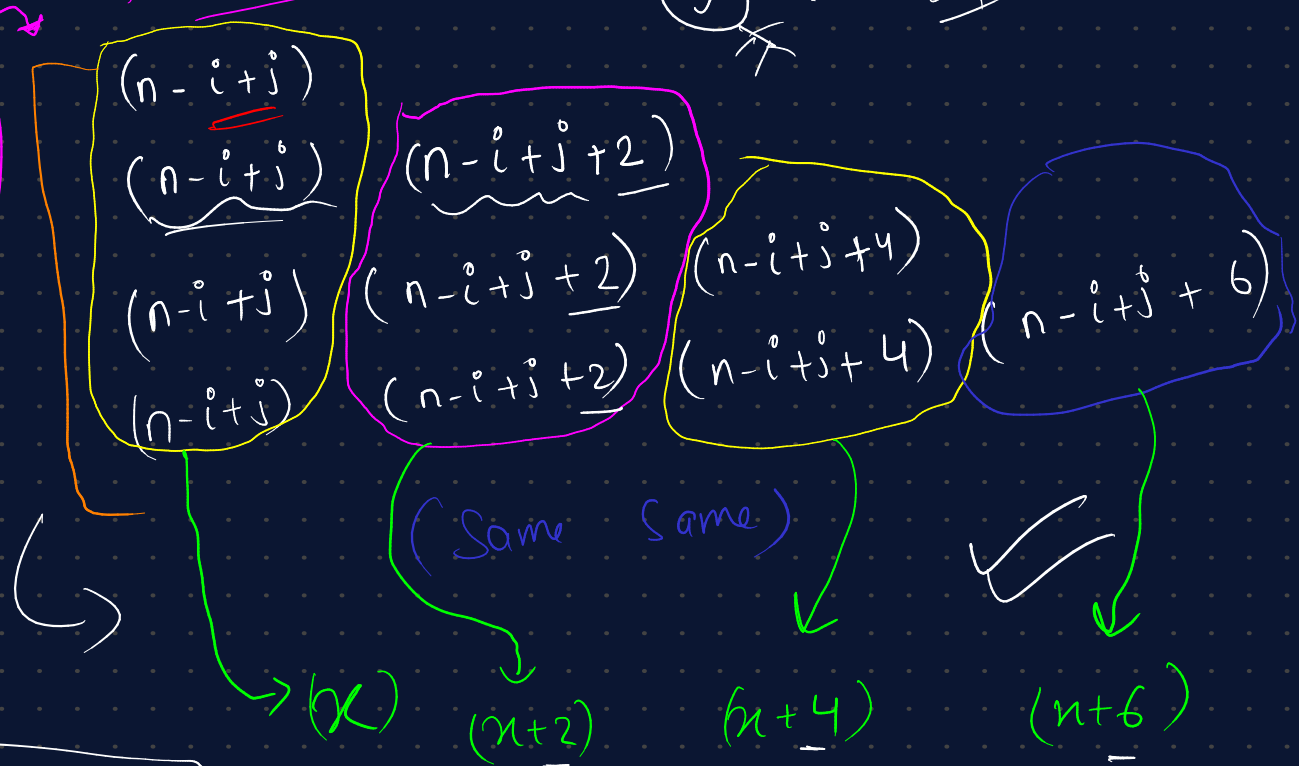
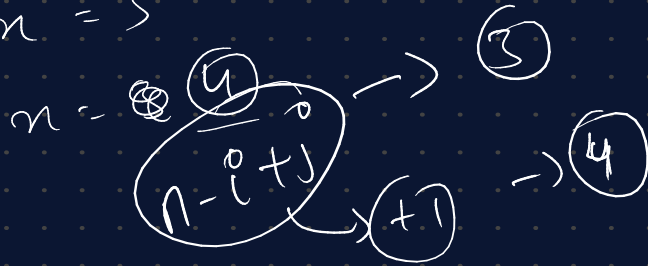
30 sec
 $n - j$
 3 formula
 \times


 ~~$n - j$~~
 ~~$n - i$~~
 ~~$n - i + 1$~~



sol: -

$$-1 + n = 3$$



$n \Rightarrow 3$

①

3

$$\begin{array}{c} i \\ \hline j \end{array}$$

$j \times j$

$$(n = n - i + j)$$

Rough



n

$$n + i + j \times j$$

$$n + i + j \times j \quad n + j \times j$$

$$n + i + j \times j \quad n + j \times j \quad n + j \times j$$

$$\begin{array}{l} n - i + j \\ n - i + j \\ n - i + j \\ n - i + j \end{array}$$

$$\begin{array}{l} n - i + j + i + j \times j \\ n - i + j + i + j \times j \\ n - i + j + i + j \times j \end{array}$$

$$n + j + (j \times j)$$



stop



$$\begin{array}{l} n - i + j + j \times j \\ n - i + j + j \times j \end{array}$$

$$n - i + j + (j \times j)$$

$$n - i + j + j \times j$$

$$n - i + j + (j \times j)$$

ch + (n - i + j - 1)

↓

⓪

D
 C D
 B C D
 A B C D

var → D

initial

User

⓪ ✓ formula

$(n - i + j - 1)$

Lenon → formula + Arithmetic

✗

✓ o/o

class → 2

fill pattern → 15 done!

So chna + Arithmetic

Breakdown

Bye

