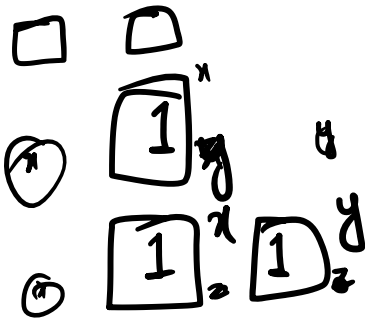
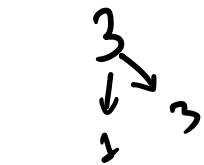
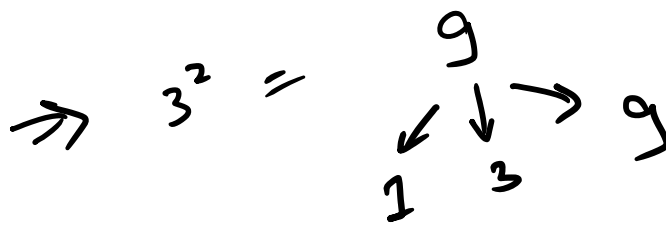
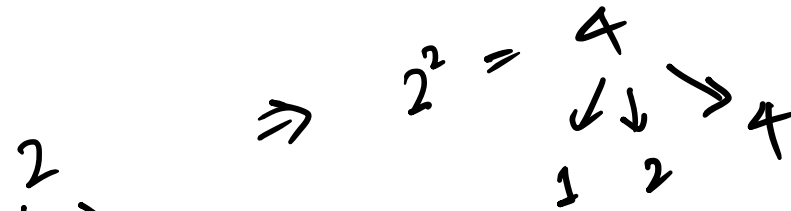
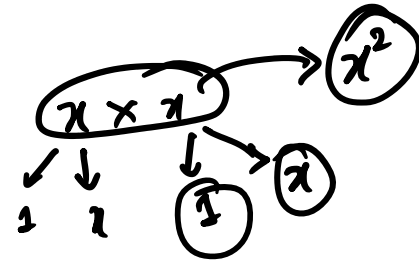
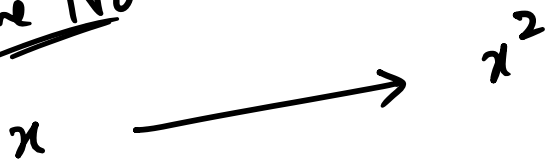


Prime No



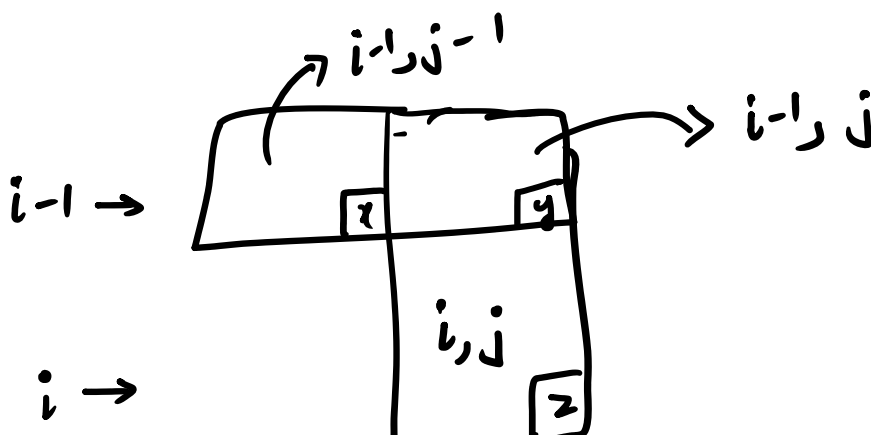
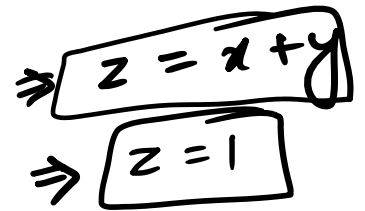
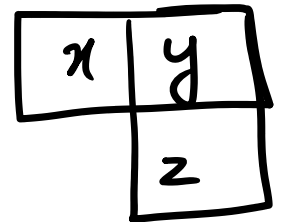
$\rightarrow R1$

$\rightarrow R2$

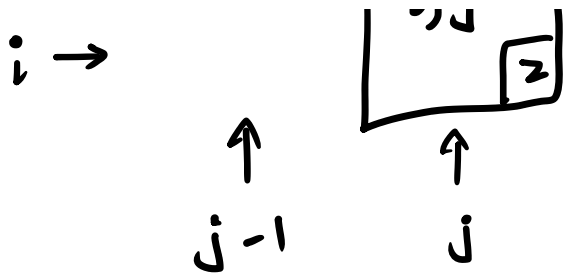
$\rightarrow R3$

$\rightarrow R4$

$\rightarrow R5$



$$\begin{aligned} x &= \text{mat}[i-1][j-1] \\ y &= \text{mat}[i-1][j] \\ z &= \text{mat}[i][j] \end{aligned}$$



```

for (i → 0 to n-1)
{
    for (j → 0 → i)    0 ≤ i
    {
    }
}

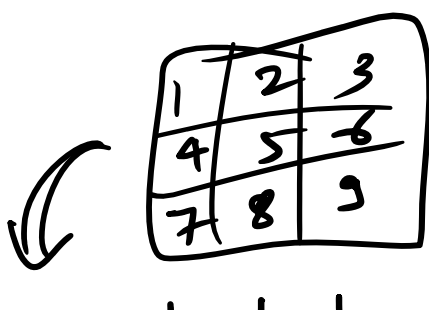
```

① $\rightarrow i=0$

1 $\rightarrow i=1$

1 2 $\rightarrow i=2$

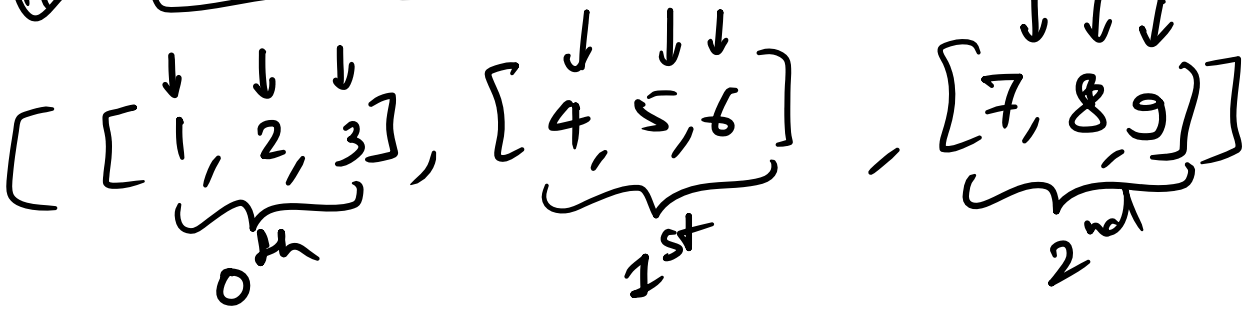
1 3 3 $\rightarrow i=3$



[]]

↓ ↓ ↓ ~ ~ ↓ ↓ ↓

III 710



$[1, 2, 3, 4, \dots, 100]$

$$\text{arr}[100] = 100$$

$$19 \rightarrow 1^2 + 9^2 = 82$$

$$82 \rightarrow 8^2 + 2^2 = 68$$

$$68 \rightarrow 6^2 + 8^2 = 100$$

$$100 \rightarrow 1^2 + 0^2 + 0^2 = \textcircled{1} \rightarrow \text{happy}$$

$$\textcircled{29} \rightarrow 2^2 + 9^2 = 85$$

$$85 \rightarrow 8^2 + 5^2 = 89$$

$$89 \rightarrow 8^2 + 9^2 = 145$$

$$145 \rightarrow 1^2 + 4^2 + 5^2 = 42$$

$$42 \rightarrow 4^2 + 2^2 = 20$$

$$20 \rightarrow 2^2 + 0^2 = 4$$

$$16 \rightarrow 1^2 + 6^2 = 37$$

$$37 \rightarrow 3^2 + 7^2 = 58$$

$$58 \rightarrow 5^2 + 8^2 = \textcircled{89}$$

$$89 \rightarrow 8^2 + 9^2 = 145$$

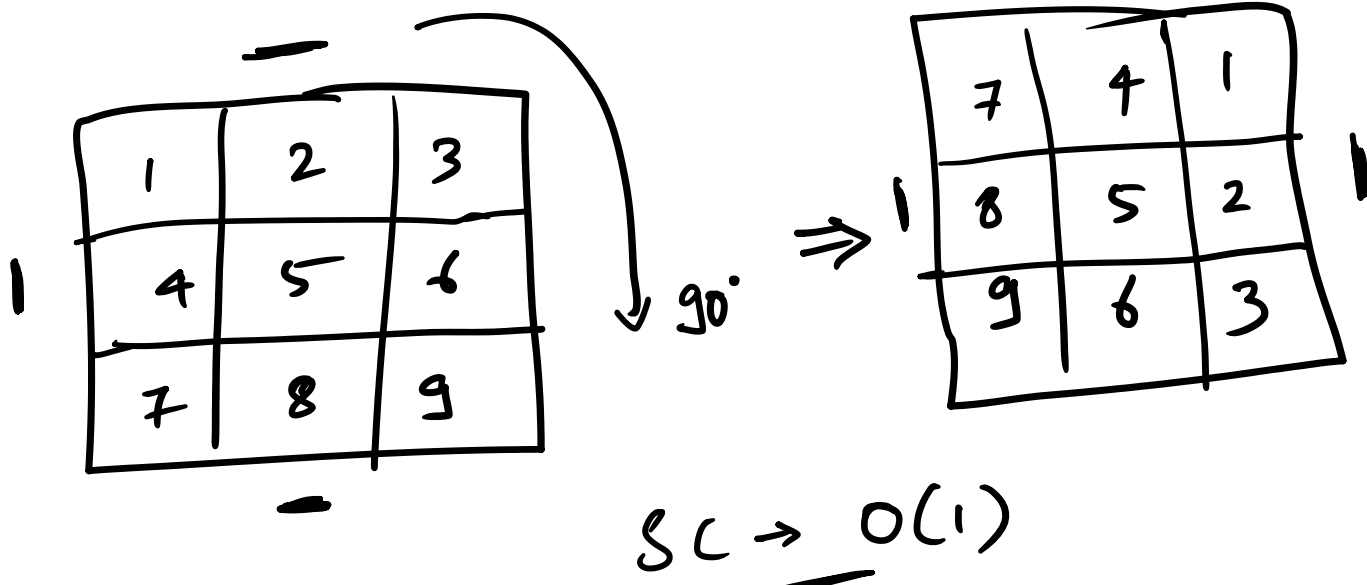
$$\begin{aligned}
 42 &\rightarrow 4 \cdot 10 \\
 20 &\rightarrow 2^2 + 0^2 = 4 \\
 4 &\rightarrow 4^2 = 16
 \end{aligned}$$

2 1 4 7 4 8 3 6 4 8 (2^{31})

\downarrow
 2 7 5
 \downarrow
 7 8
 \downarrow
 1 1 3
 \downarrow
 1 1
 \downarrow
 2

999

999 \rightarrow 243 \rightarrow 29



—