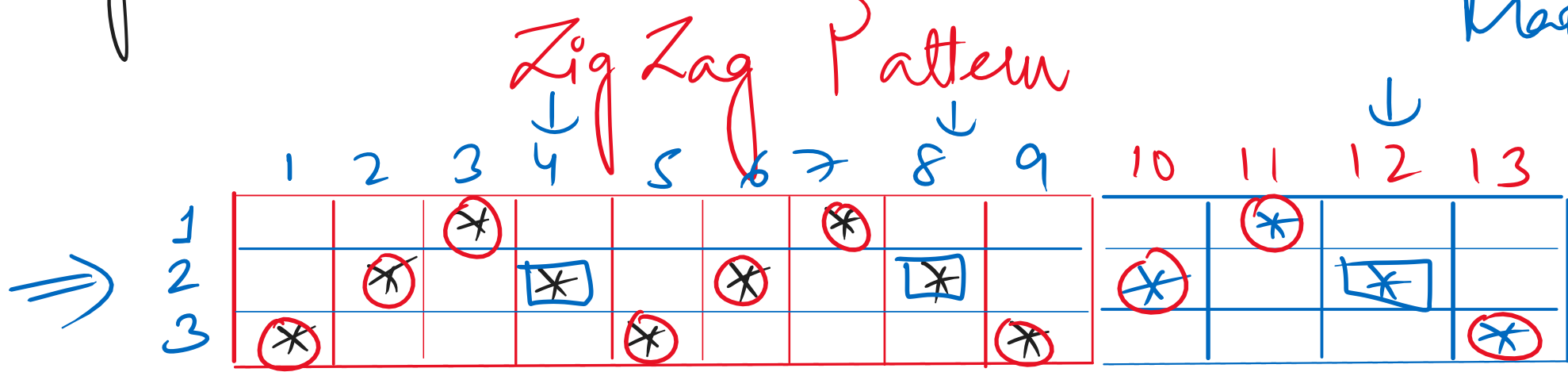


Dynamic Patterns :->

Less Time :->  
Maths :->



- (i)  $x+c$   
 $-1 \cdot 4$   
 $= -4$
- (ii)  $x-c$   
 $2 \cdot 4$   
 $= 8$

Row value is constant  $\rightarrow row = 3$

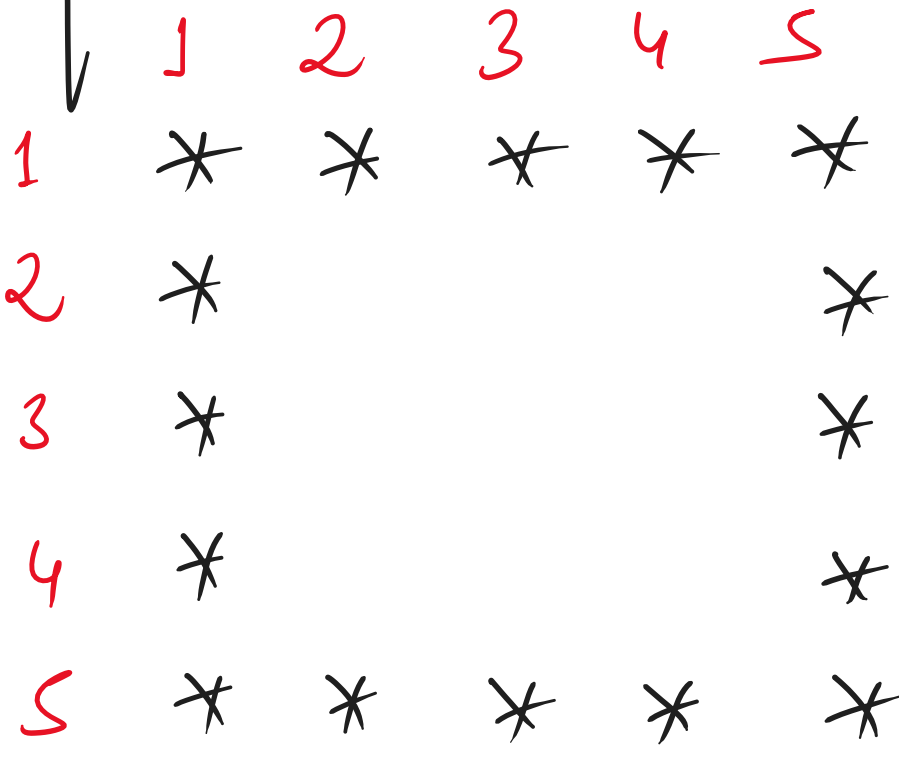
Column value changes  $\rightarrow col = 9, 13, 17, 21, 25, \dots$

- $x1 \rightarrow 3, 7, 11 \rightarrow C \cdot 4 = 3$
- $x2 \rightarrow \text{Even No} \rightarrow C \cdot 2 = 0$
- $x3 \rightarrow 1, 5, 9, 13 \rightarrow C \cdot 4 = 1$

Hollow Square Pattern :->

$n = 5$

$i = 1 \text{ to } n$   
 $j = 1 \text{ to } n$

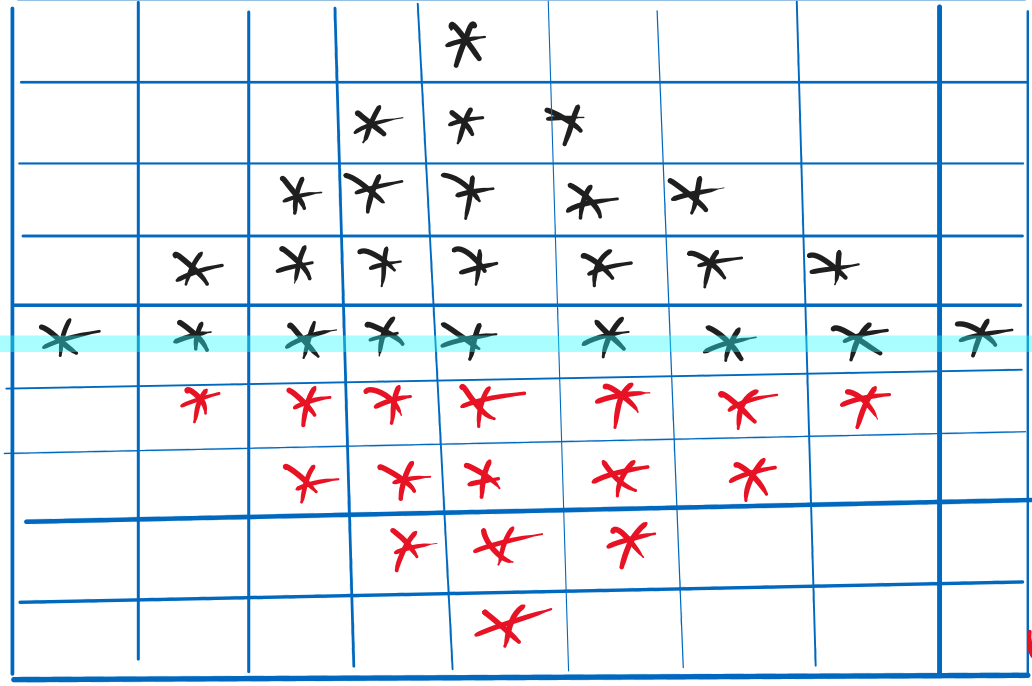


$i = 1 \rightarrow \text{Iteration 1}$   
 $1 \text{ to } n$   
 $1 \text{ to } 5$   
 $* * * * *$

Diamond Pattern :->

$n = 5$

$(1 \text{ to } n)$   $(n-i)$   
 $5-1$   
 $5-2$   
 $5-3$   
 $5-4$   
 $n-1$   $5-5$   
 $for$   
 $1$   
 $4 \text{ to } 1$



$p1$   
 $p2$

Logic Building

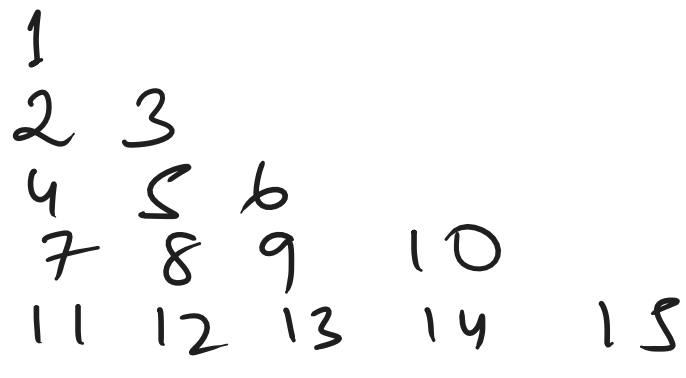
$2 \times i + 1$   
 $2 \times 1 + 1 = 3$   
 $2 \times 2 + 1 = 5$

$for (1 \text{ to } n)$   
Spaces  
Star

Floyd's Triangle :->

$n = 5$

$num = 1;$   
 $for (i = 1, i \leq n, i++) \{$   
 $for (j = 1, j \leq i, j++) \{$   
 $printf("/d", num++);$   
 $printf("/n");$   
 $\}$



row  $1 \text{ to } n$   
col  $1 \text{ to row}$   
? Print