

## Zero - One Pattern :

Row  $\rightarrow 0 \rightarrow n-1$   
 $1 \rightarrow n$

Col  $\rightarrow 0 \rightarrow \text{rows} - 1$   
 $1 \text{ to row}$

1				
0	1			
1	0	1		
0	1	0	1	
1	0	1	0	1

1  
0 1  
1 0 1

## Dynamic Pattern 2 : \*\*\* Zig Zag Pattern

$n=9$

$m=3$

	1	2	3	4	5	6	7	8	9	10	11	12	13
1			*				*				*		
2		*		*		*		*		*		*	
3	*				*				*				*

$$\textcircled{1} r+c \div 4 = 0$$

$$2 \ 4$$

$$2 \ 8$$

$$2 \ 12$$

$$r = 2$$

$$c \div 4 = 0$$

$$1 \rightarrow 3, 7, 11 \rightarrow c \div 4 = 3$$

$$2 \rightarrow \text{even} \rightarrow c \div 2 = 0$$

$$3 \rightarrow 1, 5, 9, 13 \rightarrow c \div 4 = 1$$

## Important Placement Drive Questions:

\* Hamming Weight?

func(n)  $\rightarrow$   
 int

3

11  $\rightarrow$  1011

## Reverse an Integer:

$$321 = 3 \times 100 + 2 \times 10 + 1$$

$$n = 123$$

$$\text{of} = 321$$

$$\text{ans} = 0$$

$$\text{ans} = \text{ans} \times 10 + \text{digit}$$

$$\text{ans} = 0 \times 10 + 3$$

$$= 3$$

$$\text{ans} = \text{ans} \times 10 + \underline{d}$$

$$= 3 \times 10 + 2$$

$$= 32$$

$$32 \times 10 + 1$$

$$= 321$$

$$\text{digit} = 123 \% 10 = \textcircled{3}$$

$$123/10 = 12 \% 10 = \textcircled{2}$$

$$12/10 = 1 \% 10 = \textcircled{1}$$

$$1/10 = 0 \text{ stop}$$

Enumerators  $\rightarrow$  These are named constants declared by using the "enum" keyword.

They are created using the integer data type by default but can also be represented by others. The default values are from  $[0 \text{ to } n-1]$ .

Example: mon - sun; jan - dec & so on.

## Pointers in C:

get the value  
 de-referencing

int a = 10;

var

var  $\rightarrow$  address

address operator  $\rightarrow$  &

int \* ptr = &a;

ptr

1000

1000  $\Rightarrow$  a  $\rightarrow$  value = 10

int \* ptr = &a

\*ptr = 10

2000 ptr

int \*\* pp = &ptr;

2000