

## Switch Case:

readability

if ( expression ) {

     block

} else if ( expression ) {

     block

} else {

}

( i==0 || j==0 || i==4 . . . . . )

(1) readability

(2) Constant value

(3) expression :

(1) integer

(2) string

## Structure

Switch ( value ) {

    Case value1 :

if

break;

    Case value2 :

else if

break;

    default :

else

}

exp → false/true

    if {

        } else if {

        } else {

        ✓  
        }

Value = "sai"

Case "sai" :

Case "ad" :

Case "jagadamba" :

default :

## Break, Continue in loops

- for loop
- while loop
- do-while

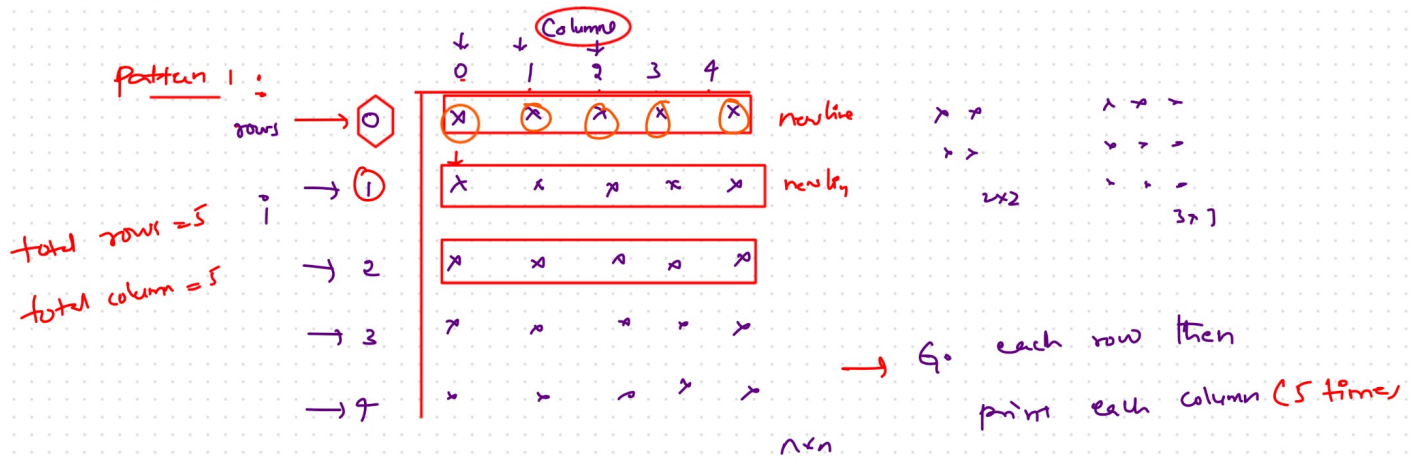
| Iteration | i value |                |
|-----------|---------|----------------|
| 1st       | 0       | i++ → 1        |
| → 2nd     | 1       | (skip) i++ → 2 |
| → 3       | 2       | i++            |
| ⋮         |         |                |
| ⋮         |         |                |
| 10        | 10      |                |
| 11        |         |                |

break : makes controller come out of the loop immediately

Continue : makes controller skip to the next iteration

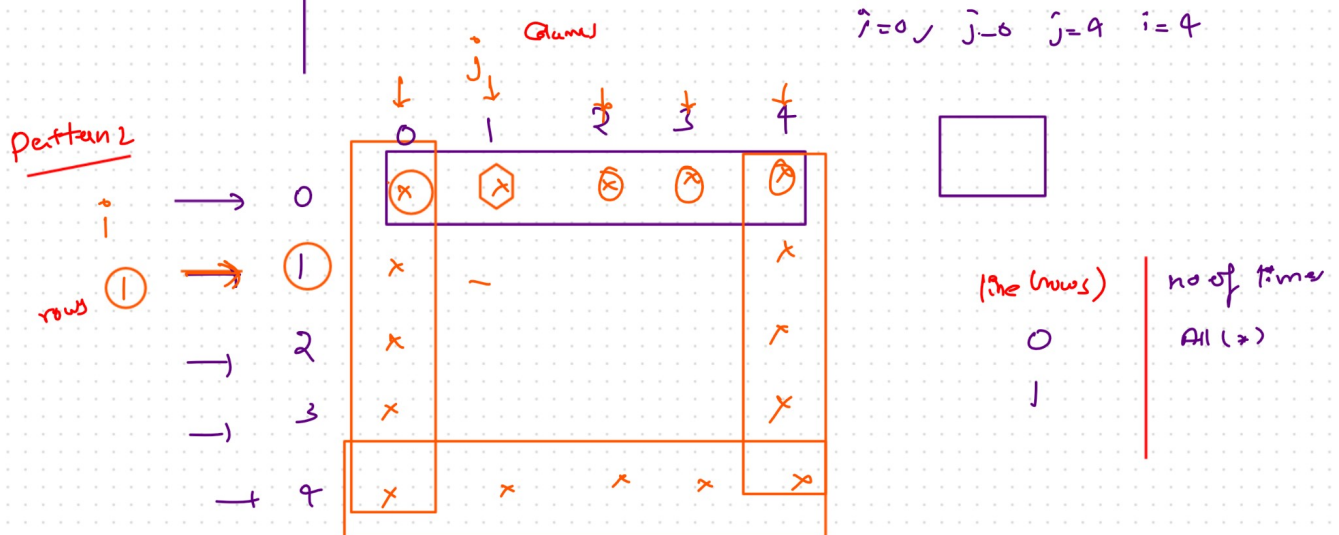
Nested loop: loop inside a loop, it can be n loops (limitless), but a recommend way use max of 3 loops

patterns: build patterns based on nested loops



| line (row) | Column        |
|------------|---------------|
| 0          | All (5 times) |
| 1          | All (5 times) |

for ← 0, 1, 2, 3, 4  
loop - go each & every row  
one each row → loop (0 - 4)  
5 times i will print



Pattern 3

$\downarrow j =$   
0 1 2 3 4

$l_2 =$

$$i = \frac{tot + 1}{2}$$

$$i = \frac{n}{2}$$

$i =$

$\rightarrow 0$

$\rightarrow 1$

$\rightarrow 2$

$\rightarrow 3$

$\rightarrow 4$

$i = 6$

$\rightarrow$

$\rightarrow$

$i = 0$

$i = 1$

$i = 2$

|   |   |   |   |   |
|---|---|---|---|---|
| A | A | A | A | A |
| D |   |   |   | A |
| A | A | A | A | D |
| A |   |   |   | A |
| A |   |   |   | A |

$j = 4$   
0 1 2 3 4

|   |   |   |   |   |
|---|---|---|---|---|
| x | x | x | x | x |
| x | - | - | - | x |

A



$j = 1$

$j = 0$

$j = 1$

$j = 0$

$$i = 0 \text{ (11)} j = 0 \text{ 1}$$

$$j = n - 1 \text{ (1 } i = n) / 2$$

$$2 = 4$$

$$1 = 2$$

$$4 = 4$$