

Functions → reusability

→ Declaration

public static return func. (parameters) {  
- type name [int a = 5]

}

func name(arguments) → calling

## main method

- take i/p
- function call
- print o/p

## function

- code
- return statement

$n = 5$

	0	1	2	3	4	
✓ 0	*	*	*	*	*	5
①	*				*	5
- 2	*	*	*	*	*	5
③	*				*	5
✓ 4	*	*	*	*	*	5

$(0, 2, 4)$   
 ) cur

$0 - n$   
 \* \*

$(1, 3)$  spaces  
 2)  $\frac{n-2}{5-2} = 3$   
 "16"

add rows.  
 $0, 4 \rightarrow *$   
 $\rightarrow \text{space}$

```
Scanner s = new Scanner(System.in);
int n = s.nextInt();

for(int i = 0; i < n; i++){ // rows
    if(i % 2 == 0){ // for even rows
        for(int j = 0; j < n; j++){ // col
            System.out.print("*" + "\t");
        }
    }
    else{ // odd rows
        System.out.print("*");
        for(int j = 0; j < n - 2; j++){
            System.out.print("\t");
        }
        System.out.print("\t*");
    }
    System.out.println();
}
```

```

int n; // 197
while(n > 0){

    int digit = n % 10; // 197 % 10 = 7  19 % 10 = 9  1 % 10 = 1
    Syso(digit); // 7 9 1
    n /= 10 // 197 / 10 = 19  19 / 10 = 1  1 / 10 = 0
}

```

% → last digit print

/ → remove last digit

234

0

2

3

4

~~2~~ ~~10~~

2x1

num x 10 + digit = 2

2x10 + 2

23

23x10 + 4

230 + 4 = 234

2x10 + 3  
20 + 3

n = 1234

1234 % 10 = 4

1234 / 10 = 123

123 % 10 = 3

123 / 10 = 12

12 % 10 = 2

12 / 10 = 1

1 % 10 = 1

1 / 10 = 0 B