

```

import java.util.*;
class demo {
    public static void main (String args) {
        Scanner sc = new Scanner (System.in);
        System.out.print ("enter num ");
        int n = sc.nextInt ();
        for (int i = 1; i <= n; i++) {
            for (int j = 1; j <= n; j++) {
                System.out.print (" * ");
            }
            System.out.println ();
        }
    }
}

```

① int i = 1 <= 5
 $\rightarrow j = 1 \leq 5$
 $\rightarrow *$
 $j = 2 \leq 5$
 $\rightarrow *$
 $j = 3 \leq 5$
 $\rightarrow *$
 $j = 4 \leq 5$
 $\rightarrow *$
 $j = 5 \leq 5$
 $\rightarrow *$
 $* * * * *$

② int i = 2 <= 5
 $\rightarrow j = 1 \leq 5 \rightarrow *$
 $j = 2 \leq 5 \rightarrow *$
 $j = 3 \leq 5 \rightarrow *$
 $j = 4 \leq 5 \rightarrow *$
 $j = 5 \leq 5 \rightarrow *$
 $* * * * *$

int i = 3 <= 5

 └→ j = 1 <= 5 → *

 j = 2 <= 5 → *

 j = 3 <= 5 → *

 j = 4 <= 5 → *

 j = 5 <= 5 → *

 * * * * *

int i = 4 <= 5

 └→ j = 1 <= 5 → *

 j = 2 <= 5 → *

 j = 3 <= 5 → *

 j = 4 <= 5 → *

 j = 5 <= 5 → *

 * * * * *

int i = 5 <= 5

 └→ j = 1 <= 5 → *

 j = 2 <= 5 → *

 j = 3 <= 5 → *

 j = 4 <= 5 → *

 j = 5 <= 5 → *

 * * * * *

int i = 6 <= 5 (False) → stop iteration

enter num - 5

- output

* * * * *

* * * * *

* * * * *

* * * * *

* * * * *

$i = 4 \leq 4$

$j = 1 \leq 4 \rightarrow \text{print}(i) - 4$
 $j = 2 \leq 4 \rightarrow 4$
 $j = 3 \leq 4 \rightarrow 4$
 $j = 4 \leq 4 \rightarrow 4$

$i = 5 \leq 4 \rightarrow (\text{false})$

Output - $m = 4$

1 1 1 1
2 2 2 2
3 3 3 3
4 4 4 4

Q-3 import java.util.*;

class demo {

public static void main(String[] args){
Scanner sc = new Scanner(System.in)
int n = sc.nextInt();

for(int i=1; i<=n; i++){
for(int j=1; j<=n; j++){
System.out.print(j);
}
System.out.println();
}

3

$i=1 \leq 4 \rightarrow j=1 \leq 4 \rightarrow \text{print}(j) = 1$
 $j=2 \leq 4 \rightarrow \text{print}(j) = 2$
 $j=3 \leq 4 \rightarrow 3$
 $j=4 \leq 4 \rightarrow 4$

1 2 3 4

$i=2 \leq 4 \rightarrow j=1 \leq 4 \rightarrow 1$
 $j=2 \leq 4 \rightarrow 2$
 $j=3 \leq 4 \rightarrow 3$
 $j=4 \leq 4 \rightarrow 4 \quad 1 \ 2 \ 3 \ 4$

$j=3 \leq 4 \rightarrow j=1 \leq 4 \rightarrow 1$
 $j=2 \leq 4 \rightarrow 2$
 $j=3 \leq 4 \rightarrow 3$
 $j=4 \leq 4 \rightarrow 4 \quad 1 \ 2 \ 3 \ 4$

$i=4 \leq 4 \rightarrow j=1 \leq 4 \rightarrow 1$
 $j=2 \leq 4 \rightarrow 2$
 $j=3 \leq 4 \rightarrow 3$
 $j=4 \leq 4 \rightarrow 4 \quad 1 \ 2 \ 3 \ 4$

$i=5 \leq 4$
X

— 1 2 3 4
1 2 3 4
1 2 3 4
1 2 3 4

