

Nested statement

if (—)

{

multiple if/else if/else

}

Nested loops

for/while {

for/while

if (

→ nested loops

multiple }

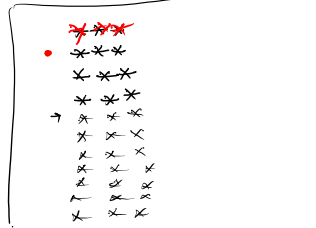
}

}

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Also, there are 12 such lines.

6

[illegible]
$$\begin{aligned} i &= 2 \leq 12 (T) \\ &\hookrightarrow j = 12 - 3 (T) \\ &\hookrightarrow i = 2 \leq 3 (T) \\ &\hookrightarrow j = 3 - 3 (T) \\ &\hookrightarrow j = 4 \leq 3 (F) \end{aligned}$$
$$\begin{aligned} i &= 4 \leq 12 (T) \\ \hookrightarrow j &= 1 \leq 3 (T) \\ \hookrightarrow j &= 2 \leq 3 (T) \\ \hookrightarrow j &= 3 \leq 3 (T) \\ \hookrightarrow j &= 4 \leq 3 (F) \end{aligned}$$

$i = 12 \leq 12$ (T)
 $\hookrightarrow j = 1 \leq 3$ (T)
 $\hookrightarrow j = 2 \leq 3$ (T)
 $\hookrightarrow j = 3 \leq 3$ (T)
 $\hookrightarrow j = 4 \leq 3$ (F)

(1) $\rightarrow i = 13 \angle = 12 (F)$

next loop

For particular
value of i
we are running
a loop of j
from $j=1$ to
 $j=n$

Pattern 3 - nxn star rectangle

Problem

Submissions

Leaderboard

Discussions

Take n as an integer input. Then print $n \times n$ star rectangle as mentioned below.

In each line, n stars should be printed.

And there should be n such lines.

Sample Input 0

4

Sample Output 0

```
****
****
****
****
```

$n=4$

```
for (int i=1; i<=n; i++)
{
    for (int j=1; j<=n; j++) -
    {
        cout<<"*";
    }
    cout<<"\n";
}
```

GKSTR19 Pattern_4

Problem

Submissions

Leaderboard

Discussions

Take Integer **N** as input and print the following pattern.

Sample Input 0

5

Sample Output 0

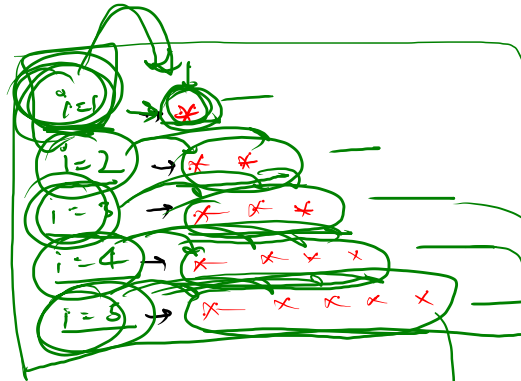
```

*
* *
* * *
* * * *
* * * * *
    
```

lines \rightarrow $\text{for}(\text{int } i=1; i \leq n; i++)$

stars \rightarrow $\text{for}(\text{int } j=1; j \leq i; j++)$

5 minutes



$i=1 \quad c=1(T)$
 $i=2 \quad c=2$
 $i=3 \quad c=3$

$i=1 \quad c=3(T)$
 $2 \quad c=3(F)$
 $3 \quad c=3(T)$

$i=3$

$\text{for}(\text{int } j=1; j \leq i; j++)$

Supo P

$n=5$

following pattern.

1
1 2
1 2 3
1 2 3 4
1 2 3 4 5

```
for (int i=1; i<=n; i++)
{
    for (int j=1; j<=i; j++)
        sys(j)
}
```

1
1 2
1 2 3

$i=1, c=5(T)$
 $\hookrightarrow j=1, c=1(T)$
 $\hookrightarrow j=2, c=1(T)$

$i=2, c=5(T)$
 $\hookrightarrow j=1, c=2(T)$
 $\hookrightarrow j=2, c=2(T)$
 $\hookrightarrow j=3, c=2(F)$

$i=3, c=5(T)$
 $\hookrightarrow j=1, c=3(T)$
 $\hookrightarrow j=2, c=3(T)$
 $\hookrightarrow j=3, c=3(T)$

GKSTR20 Pattern_5

Problem

Submissions

Leaderboard

Discussions

Take Integer **N** as input and print the following pattern.

5 n=5

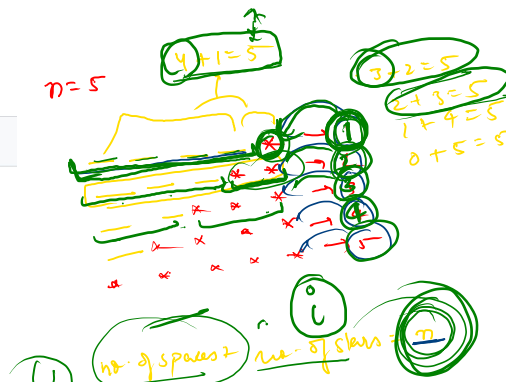
Sample Output 0

```

*
**
***
****
*****

```

line \rightarrow for (int i=1; i<=n; i++) {
 space { for (int j=1; j<=n-i; j++) {
 space: { for (int j=1; j<=i; j++) {
 space: { sysout(" ");
 sysout(" ");
 }
 }
 }
 }



① no. of spaces + no. of stars = n
 i=1, \rightarrow space
 no. of spaces = (n-i) \rightarrow space
 i=1, 5-1=4
 i=2, 5-2=3

O/P

```

- - - - *
- - - * *
- - * * *
- * * * *

```

stars
 i=1 c=5 (T)
 j=1 c=4 (T)
 j=2 c=4 (T)
 j=3 c=4 (T)
 j=4 c=4 (T)
 j=5 c=4 (F)

stars
 i=2 c=5 (T)
 j=1 c=3 (T)
 j=2 c=3 (T)
 j=3 c=3 (T)
 j=4 c=3 (F)

stars
 i=3 c=5 (T)
 j=1 c=2 (T)
 j=2 c=2 (T)
 j=3 c=2 (F)
 j=4 c=2 (F)

stars
 i=4 c=5 (T)
 j=1 c=1 (T)
 j=2 c=1 (F)
 j=3 c=1 (F)
 j=4 c=1 (F)