

Ans $val = 32/2 = 16/2 = 8/2 = 4/2 = 2/2 = 1$

① ① ① ① ①

ans 5

$35 \Rightarrow n/2 \geq 1$ $count = ?$

$count = 0;$
 $while (n \geq 1) \{$
 $n = n/2; -$
 $count++; -$

\downarrow
ans = count.

$34/2 = 17/2 = 8/2 = 4/2 = 2/2 = 1$

① ② ③ ④ 5

public class Solution {

public static void main(String[] args) {
 Scanner scn = new Scanner(System.in);
 int n = scn.nextInt();
 int count=0;
 while(n>=1){
 n = n/2;
 count++;
 }

System.out.println(count);

/* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should

}

$n/2 = 0$

$n/2 = [0.5]$

$n = 32$

16
 ~~8~~
 4
 2

$\rightarrow 0$

count

$[0] + 2 = 2$
 4
 5
 6

count = 6

max steps

$n = 5$

$\rightarrow 10 \quad 7 \quad 12 \quad 13 \quad 9$

$max = -100$

$mul = 1$

$sum = 0$

$max \leftarrow (-\infty, -3) = -3$

$min = (+\infty, \underline{1024892}) = 1024892$

$\left\{ \begin{array}{l} \text{Integer, MAXVALUE} = +\infty \\ \text{Integer, MINVALUE} = -\infty \end{array} \right\}$

$n = 5 \rightarrow 10 \quad 7 \quad 12 \quad 13 \quad 9$

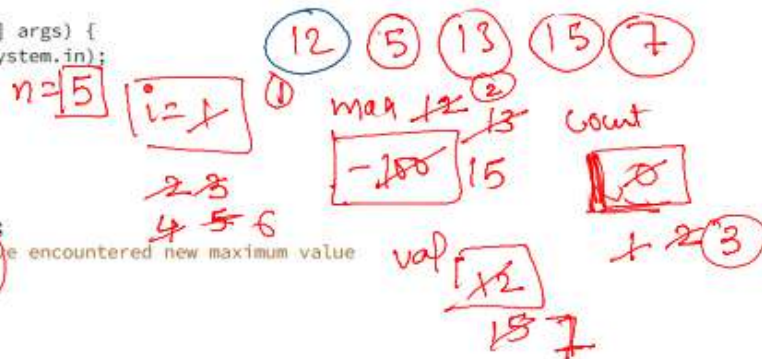
n = 5 → 10 7 12 13 9

```
int i = 1 → n
int count = 0;
int max = -100;
while (i ≤ n) {
    int val = scn.nextInt();
    if (val > max) {
        max = val;
        count++;
    }
    i++;
}
System.out.println(count);
```

Imp

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

```
    int i = 1;
    int max = -100;
    int count = 0;
    while (i ≤ n) {
        int val = scn.nextInt();
        if (max < val) { // you have encountered new maximum value
            max = val;
            count++;
        }
        i++;
    }
}
```



```
System.out.println(count);
```

Print char series

Small letter

\rightarrow z x x W v U t - - - -
 $i \Rightarrow$ (25) (24) 23 22 21 20 19 - - - -

int i = 25;

while (i >= 0) {

if (i % 2 == 1) {
 char ch = char('a' + i);
 syso(ch);

} else {
 char ch1 = char('A' + i);
 syso(ch1);
 i--;

public static void main(String[] args) {

int i = 25;
 while (i >= 0) {
 if (i % 2 == 1) {
 char ch = (char)('a' + i);
 System.out.print(ch + " ");
 } else {
 char ch1 = (char)('A' + i);
 System.out.print(ch1 + " ");
 }
 i--;
 }

$i = 25, 24 = (-1)$

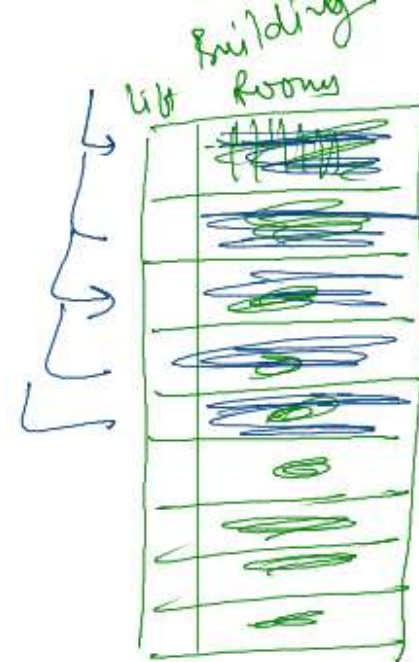
$'A' + 24 = 'y'$

/* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be name

}

Diagram illustrating a 2D array structure with indices i (rows) and j (columns). The array is labeled "Floor" on the left and "Building Rooms" on the right.

$i \Rightarrow$	0	1	2	3	4
0	00	01	02	03	04
1	10	11	12	13	14
2	20	21	22	23	24
3	30	31	32	33	34
4	40	41	42	43	44
5	50	51	52	53	54



i
 $\boxed{x} + 2$
 j
 $\boxed{y} + 2$

for (int $i=0$; $i < n$; $i++$) \Rightarrow floor

for (int $j=0$; $j < m$; $j++$) \Rightarrow 0th floor
 \downarrow
 // code (i, j)

00 01 02 110th floor
 10 11 12 111st floor

Ques

n = 3

→
* * *
* * *
* * *
:
:
:
* * *

for (i = 1 to 12) {
 for (i = 1 to 3) {
 sysout("*");
 }
}

```
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         int n = scn.nextInt();
9
10        for(int row = 1; row <= 12; row++){
11            for(int col = 1; col <= n; col++){
12                System.out.print("*");
13            }
14            System.out.println();
15        }
16        /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should
17        */
18    }
```

Row ↓ J [X] X 3

col1 col2 col3

Row 1 → * * *

Row 2 → * * *

Row 3 → * * *

Row 4 →

Row 5 →

Row 6 →

Row 7 →

Row 8 →

Row 9 →

Row 10 →

Row 11 →

Row 12 →

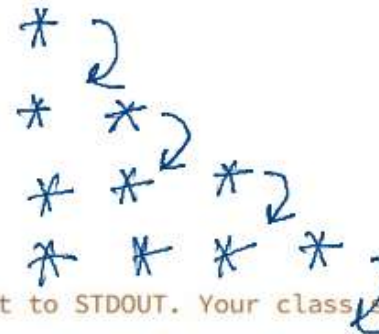
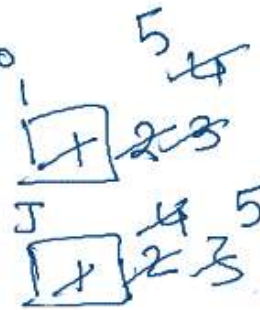


Java 8

```

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

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

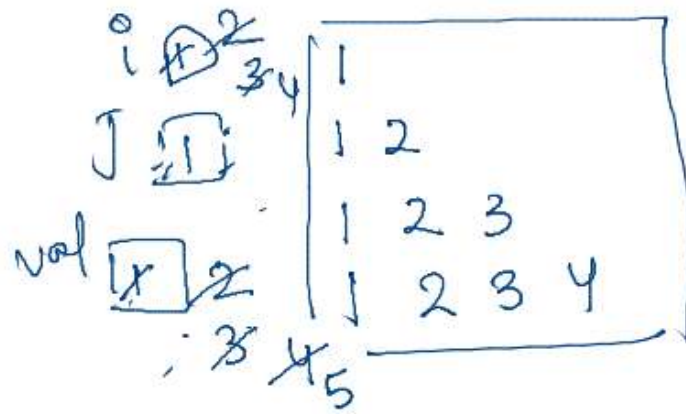


/* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be



```

3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         int n = scn.nextInt();
9
10        for(int i = 1; i <= n; i++){
11            int val = 1;
12            for(int j = 1; j <= i; j++){
13                System.out.print(val + " ");
14                val++;
15            }
16            System.out.println();
17        }
18        /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should b
  
```



```

3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         int n = scn.nextInt();
9
10        for(int i =1;i<=n;i++){
11            int val=1;
12            for(int j =1;j<=i;j++){
13                System.out.print(val+" ");
14                val++;
15            }
16            System.out.println();
17        }
18        /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should b
19    }

```

