

Star Pattern

Problem Description: You are given with an input number N, then you have to print the given star pattern corresponding to that number N.

How to approach?

- 1. Take N as input from the user.
- 2. Figure out the number of rows, (which is N here) and run a loop for that.
- 3. Now, figure out the number of columns in ith row (i.e. 2*(i)-1) and run a loop for that within this. Here, first you need to run a loop to print the spaces too.
- 4. Now, figure out "What to print?" in a particular row, column number. Here we have to print "*".

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Pseudo code for the given problem:

input=N

i=1

While i is less than equal to N:

spaces=1

While spaces is less than (n-i):

print('')

Increment spaces by 1

j=1

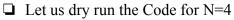
While j is less than equal to 2*i-1:

print("*")

Increment j by 1

Increment i by 1

Add a new line here
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• i=1(<=4)



- → 4-1=3 spaces are getting printed first.
- \rightarrow j=1(<=2*1-1), so print "*"
- \rightarrow j=2 (>2*1-1), move out of the inner loop with a new line
- i=2(<=4)
 - → 4-2=2 spaces are getting printed first.
 - \rightarrow j=1 (<=2*2-1), so print "*"
 - \rightarrow j=2 (<=2*2-1), so print "*"
 - \rightarrow j=3 (<=2*2-1), so print "*"
 - \rightarrow j=4(>2*2-1), move out of the inner loop with a new line
- i=3(<=4)
 - → 4-3=1 space is getting printed first.
 - \rightarrow j=1(<=2*3-1), so print "*"
 - \rightarrow j=2(<=2*3-1), so print "*"
 - \rightarrow j=3(<=2*3-1), so print "*"
 - \rightarrow j=4(<=2*3-1), so print "*"
 - \rightarrow j=5(<=2*3-1), so print "*"
 - \rightarrow j=6(>2*3-1), move out of the inner loop with a new line
- i=4(<=4)
 - → 4-4=0 no space is getting printed.
 - \rightarrow j=1(<=2*4-1), so print "*"
 - \rightarrow j=2(<=2*4-1), so print "*"
 - \rightarrow j=3(<=2*4-1), so print "*"
 - \rightarrow j=4(<=2*4-1), so print "*"
 - \rightarrow j=5(<=2*4-1), so print "*"
 - \rightarrow j=6(<=2*4-1), so print "*"
 - \rightarrow j=7(<=2*4-1), so print "*"
 - \rightarrow j=8(>2*4-1), move out of the inner loop with a new line
- i=5(>4), move out of the loop

So, final output:

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