

Square Pattern

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

For example if N=4

Pattern output : 4444

4444

4444

4444

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 number of columns to be printed in ith row or generic row (which is the N here) and run a loop for that within this.
4. Now, figure out “What to print?” in a particular (row, column). It can depend on the column number, row number or N which is N here.

Pseudo code for the given problem:

input=N

i=1

While i is less than or equal to N:

j=1

While j is less than or equal to N:

print(N)

Increment j by 1

Increment i by 1

Add a new line here

❑ Let us dry run the Code for N=4

- *i=1(<=4)*
 - *j=1 (<=4)*, so print 4.
 - *j=2 (<=4)*, so print 4.
 - *j=3 (<=4)*, so print 4.
 - *j=4 (<=4)*, so print 4.

→ $j=5(>4)$, move out of the inner loop with a new line.

- $i=2(<=4)$

→ $j=1 (<=4)$, so print 4.

→ $j=2 (<=4)$, so print 4.

→ $j=3 (<=4)$, so print 4.

→ $j=4 (<=4)$, so print 4.

→ $j=5(>4)$, move out of the inner loop with a new line.

- $i=3(<=4)$

→ $j=1 (<=4)$, so print 4.

→ $j=2 (<=4)$, so print 4.

→ $j=3 (<=4)$, so print 4.

→ $j=4 (<=4)$, so print 4.

→ $j=5(>4)$, move out of the inner loop with a new line.

- $i=4(<=4)$

→ $j=1 (<=4)$, so print 4.

→ $j=2 (<=4)$, so print 4.

→ $j=3 (<=4)$, so print 4.

→ $j=4 (<=4)$, so print 4.

→ $j=5(>4)$, move out of the inner loop with a new line.

- $i=5(>4)$, move out of the loop

So , final output:

4 4 4 4

4 4 4 4

4 4 4 4

4 4 4 4