Interesting Alphabets

Problem Description: You are given with an input number N, then you have to print the given alphabet pattern corresponding to that number N.
For example if N=4
Pattern output:D
CD
BCD
ABCD

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 the ith row (which is equal to row number i.e i here) and run a loop for that within this.
4. Now, figure out "What to print?" in a particular row, column number. It can depend on the column number, row number or N which depends on all of them here. As each row starts from 'A'+n-i and an increment of 1 is done for each column.

Pseudo code for the given problem:

```
input=N
i=1
While i is less than equal to N:
        Character x='A'+n-i
        While j is less than equal to i:
                print(x)
                Increment j by 1
                Increment x 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 (<=1), so print 'D'.
    - ➔ j=2(>1), move out of the inner loop with a new line.

- i=2(<=4)
  - ➔ j=1 (<=2), so print ‘C’.
  - ➔ j=2 (<=2), so print ‘D’.
  - ➔ j=3(>2), move out of the inner loop with a new line.

- i=3(<=4)
  - ➔ j=1 (<=3), so print ‘B’
  - ➔ j=2 (<=3), so print ‘C’
  - ➔ j=3 (<=3), so print ‘D’
  - ➔ j=4(>3), move out of the inner loop with a new line.

- i=4(<=4)
  - ➔ j=1 (<=4), so print ‘A’
  - ➔ j=2 (<=4), so print ‘B’
  - ➔ j=3 (<=4), so print ‘C’
  - ➔ j=4 (<=4), so print ‘D’
  - ➔ j=5(>4), move out of the inner loop with a new line.

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

So , final output:

D
CD
BCD
ABCD