

Problem Statement

Loops are control structures that iterate over a range to perform a certain task.

There are two kinds of loops in Python.

A *for* loop:

```
for i in range(0,5):  
    print i
```

And a *while* loop:

```
i = 0  
while i < 5:  
    print i  
    i+=1
```

Here, the term `range(0,5)` returns a list of integers from 0 to 5: `[0,1,2,3,4]`.

Task

Read an integer N . For all non-negative integers $i < N$, print i^2 . See the sample for details.

Input Format

The first and only line contains the integer, N .

Constraints

$$1 \leq N \leq 20$$

Output Format

Print N lines, one corresponding to each i .

Sample Input

```
5
```

Sample Output

```
0  
1  
4  
9  
16
```