# Loops



#### **Problem Statement**

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

There are two kinds of loops in Python.

For Loop

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

## While loop

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

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 N.

#### **Constraints**

 $1 \le N \le 20$ 

## **Output Format**

Print N lines, one corresponding to each i.

## **Sample Input**

5

## **Sample Output**

```
0
1
4
9
16
```