

Most of the times, the students of Computer Science & Engineering of BUET deal with bogus, tough and very complex formulae. That is why, sometimes, even for a easy problem they think very hard and make the problem much complex to solve. But, the team members of the team “**BUET PESSIMISTIC**” are the only exceptions. Just like the opposite manner, they treat every hard problem as easy and so cannot do well in any contest. Today, they try to solve a series but fail for treating it as hard. Let them help.

## Input

Just try to determine the answer for the following series

$$\sum_{i=1}^N iA^i$$

You are given the value of integers  $N$  and  $A$  ( $1 \leq N \leq 150$ ,  $0 \leq A \leq 15$ ).

## Output

For each line of the input, your correct program should output the **integer** value of the sum in separate lines for each pair of values of  $N$  and  $A$ .

## Sample Input

```
3 3
4 4
```

## Sample Output

```
102
1252
```