

<https://course.acciojob.com/idle?question=e556af86-9b3a-48a9-92ab-5905139c9d24>

● EASY

● Max Score: 30 Points

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## power calculation

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You are given two integers,  $N$  and  $x$ . You have to find  $x$  raised to the power  $N$  in  $O(N)$  time complexity using recursion.

Note Complete the given function and use recursion to solve this problem.

It is guaranteed that the test cases are made such that the answer does not overflow a 64-bit integer datatype.

### Input Format

The first line contains two integers,  $x$ , and  $N$ .

### Output Format

Print the answer.

### Example 1

Input

2 3

Output

8

Explanation

**2 raised to the power 3 is 8.**

## Example 2

Input

10 5

Output

100000

Explanation

**10 raised to the power 5 is 100000.**

## Constraints

$1 \leq X \leq 10^8$

$1 \leq N \leq 64$

### Topic Tags

- **Recursion**

# My code

```
// n java
```

```
import java.util.*;
```

```
class Main {
```

```
    public static long xPowerN(int x, int n){
```

```
        //write code here
        long ans=1L;
        for(int i=0;i<n;i++)
            ans=ans*x;
    return ans;

}
public static void main(String[] args)
{
    Scanner sc = new Scanner(System.in);
    int x = sc.nextInt();
    int n = sc.nextInt();
    System.out.println(xPowerN(x, n));
}
}
```