

Find power of a number

Problem Description: You are given a number x and another number n . You have to print x^n (x raised to the power n).

For example, if $x=3$ and $n=2$ then, you have to print 9 (3^2).

How to approach?

1. Take x and n as input from the user.
2. x^n basically means, multiplying x , n times. So, initialize an ans with 1.
3. Now, run a loop until n becomes 0, and multiply x with ans each time.
4. Print the final ans obtained.

Pseudo code for this problem:

Input = x

Input = n

$ans = 1$

While n is greater than 0:

*$ans = ans * x$*

Decrement n by 1

Print(ans)

❑ Let us dry run the code:

$x=4$ and $n=2$

- $ans = 1$
- $n=2(>0)$, so $ans=1*4=4$
- $n=1(>0)$, so $ans=4*4=16$
- $n=0(==0)$, so move out of the loop and we will print the ans
- Output:
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