**POWER(O(LOGN))**

Take as input x and n, two numbers. Write a function to calculate x raise to power n. Target complexity is O(logn). NOTE: Try both recursive and bitmasking approach.

**Input Format:**

Enter the number N and its power P

**Constraints:**

None

**Output Format**

Display N^P

**Sample Input**

2

3

**Sample Output**

8

Program-

#include<iostream>

using namespace std;

int main()

{

int x,n,ans=1,last\_bit;

cin>>x>>n;

while(n>0)

{

last\_bit=(n&1);

if(last\_bit)

{

ans=ans\*x;

}

x=x\*x;

n=n>>1;

}

cout<<ans<<endl;

}