**Exponential using divide and conquer**

#include <bits/stdc++.h>

#include<iostream>

#include<stdio.h>

#include<conio.h>

#include <stdlib.h>

#include<time.h>

using namespace std;

int b;

long power(int a, int n)

{

if(n==0)

return 1;

if(a == 0)

return 1;

b=n;

if(n%2 == 0)

{

return power(a\*a, b/2);

}

else

{

return a \* power(a\*a, b/2);

}

}

int main()

{

long int exp;

int a,b;

printf("Enter value for a^b");

scanf("%d %d",&a,&b);

exp=power(a,b);

printf("\n Exp is %d ",exp);

}