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//24/09/1999

// Xay dung cac ham tinh de quy

#include <iostream>

using namespace std;

int S1 ( int n )

{

if ( n == 1 )

return 1;

return n + S1( n - 1);

}

int S2( int n )

{

if ( n ==1 )

return 1;

return (n \* n) + S2( n - 1);

}

double S3 ( int n )

{

if ( n == 1)

return 1;

return ( 1.0/n)+ S3( n - 2);

}

int S4( int n )

{

if ( n == 0)

return 1;

return n \* S4( n - 1);

}

int main ()

{

int n;

do {cout <<" Ban hay nhap vao gia tri con n: ";

cin >> n;

if ( n % 2 == 0)

cout <<" Nhap sai. Nhap lai\n";

} while ( n % 2 == 0);

cout <<" Tong 1+2+3+...+n = " << S1(n) << endl;

cout <<" Tong 1^2 + 2^2 + .....+ n^2 = " << S2(n) << endl;

cout <<" Tong 1+ 1/3 + 1/5 + ...+ 1/n = " <<S3(n) << endl; // n la so le

cout <<" Tong 1! +2! + ...+ n! = " << S4(n ) << endl;

system ("pause");

return 0;

}