#include <iostream>

using namespace std;

int f1(int n) {

int x1 = 0, x2 = 2, x3 = 5, xn;

if (n == 1)

return x1;

if (n == 2)

return x2;

if (n == 3)

return x3;

for (int i = 4; i <= n; i++) {

xn = x3 - x2 + x1;

x1 = x2;

x2 = x3;

x3 = xn;

}

return xn;

}

int f2(int n) {

int x1 = 0, x2 = 2, x3 = 5, xn;

if (n == 1)

return x1;

if (n == 2)

return x2;

if (n == 3)

return x3;

xn = x3 - x2 + x1;

x1 = x2;

x2 = x3;

x3 = xn;

return(f2(n-1)- f2(n - 2)+ f2(n - 3));

}

void f3(int n, int& res) {

int x1, x2, x3;

if (n == 1) {

res = 0;

return;

}

if (n == 2) {

res = 2;

return;

}

if (n == 3) {

res = 5;

return;

}

f3(n - 1, x1);

f3(n - 2, x2);

f3(n - 3, x3);

res = x1 - x2 + x3;

}

int main() {

int sw, n, res;

cin >> n;

cin >> sw;

switch (sw)

{

case 1:

cout << f1(n) << endl;

break;

case 2:

cout << f2(n) << endl;

break;

case 3:

f3(n,res);

cout << res << endl;

break;

}

system("pause");

return 0;

}