1

#include <iostream>

#include <cmath>

#include <stdlib.h>

using namespace std;

void fill(double\* arr, const int n) {

for (int i = 0; i < n; i++) {

arr[i] = rand() % 10;

}

}

int main() {

const int n = 50;

double a[4], x[n];

fill(a, 4);

fill(x, n);

for (int i = 0; i < n; i++) {

double b = ((x[i] \* x[i] - x[i] - a[0]) / (x[i] - a[0]))

\*((x[i] \* x[i] - x[i] - a[1]) / (x[i] - a[1]))

\*(x[i]-a[2])

- ((pow(x[i],4) - x[i] - a[3]) / x[i]) + x[i]\*(x[i]+a[2]);

cout << b << endl;

}

}

2а

#include <iostream>

using namespace std;

int main() {

int n;

cin >> n;

int\* arr = new int[n+1];

arr[0] = 0;

arr[1] = 1;

for (int i = 2; i < n+1; i++) {

arr[i] = arr[i - 2] + arr[i - 1];

}

for (int i = 0; i < n+1; i++) {

cout << arr[i] << " ";

}

}

2б

#include <iostream>

#include <math.h>

using namespace std;

int main() {

const double e = 2.71828;

int n;

double x;

cin >> n >> x;

double\* arr = new double[n+1];

arr[0] = 0;

for (int k = 1; k < n+1; k++) {

arr[k] = pow(e, cos(pow(x, 2\*k)))\*sin(pow(x, 3\*k));

cout << arr[k] << endl;

}

double a, max = abs(modf(arr[1], &a)), num = arr[1];

for (int i = 2; i < n+1; i++) {

double n = abs(modf(arr[i], &a));

if (abs(0.5 - n) > abs(0.5 - max)) {

max = n;

num = arr[i];

}

}

cout << endl << max << endl;

}

16a

#include <iostream>

#include <math.h>

using namespace std;

void fill(double arr[], int n) {

for (int i = 0; i < n+1; i++) {

arr[i] = rand() % 10;

}

}

int main() {

int n;

cin >> n;

double\* x= new double[n + 1];

fill(x, n);

double sum = 0;

for (int i = 3; i < n+1; i++) {

sum += (x[i-2]+x[i-1]+x[i])\*x[i-1];

}

cout << sum;

}