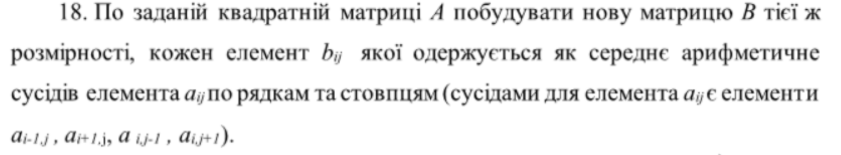
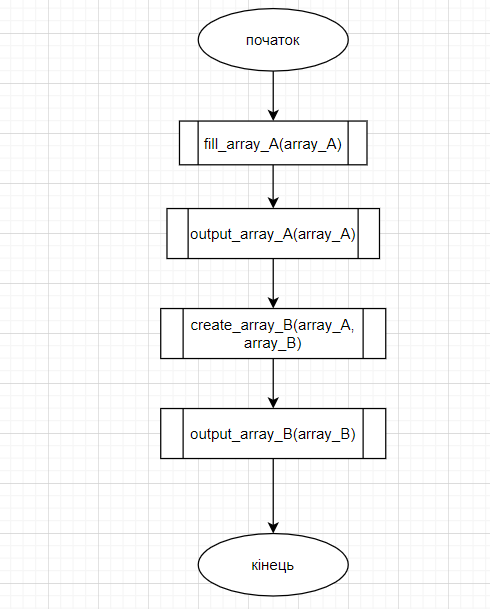
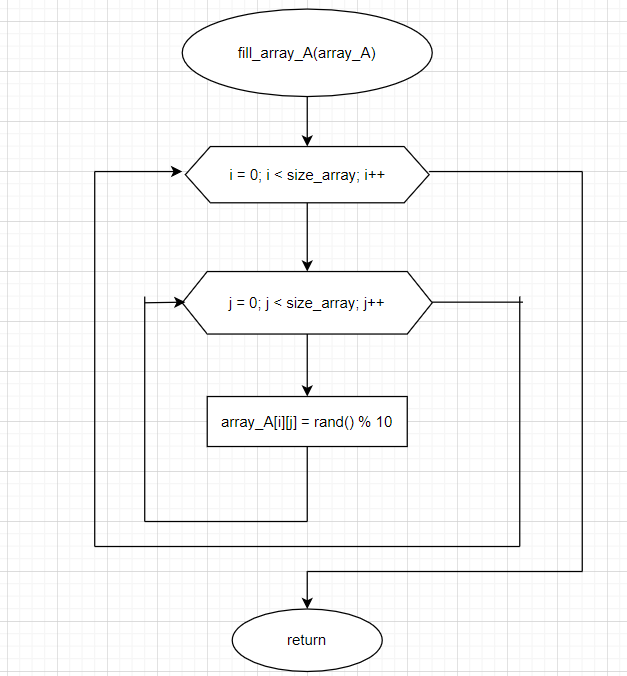
Добридник Світлана ІП-02

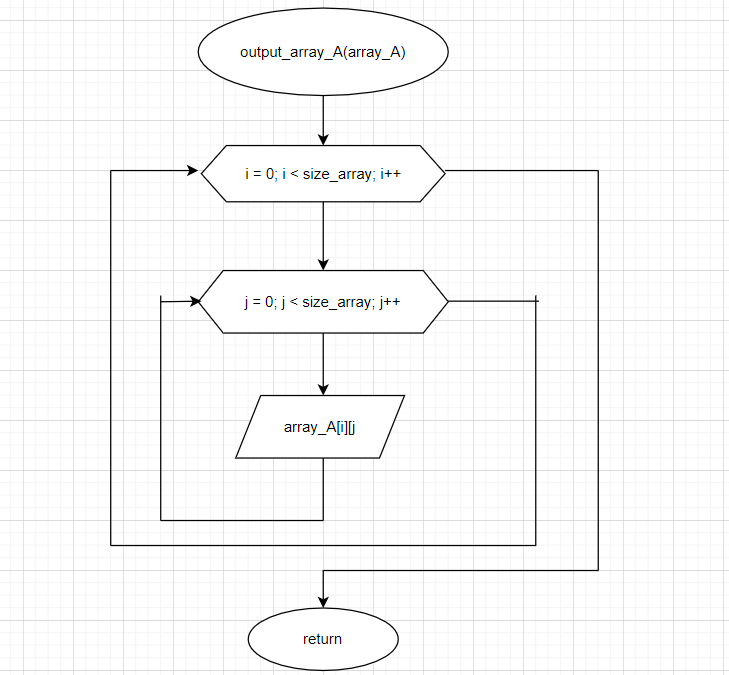
Варіант 18

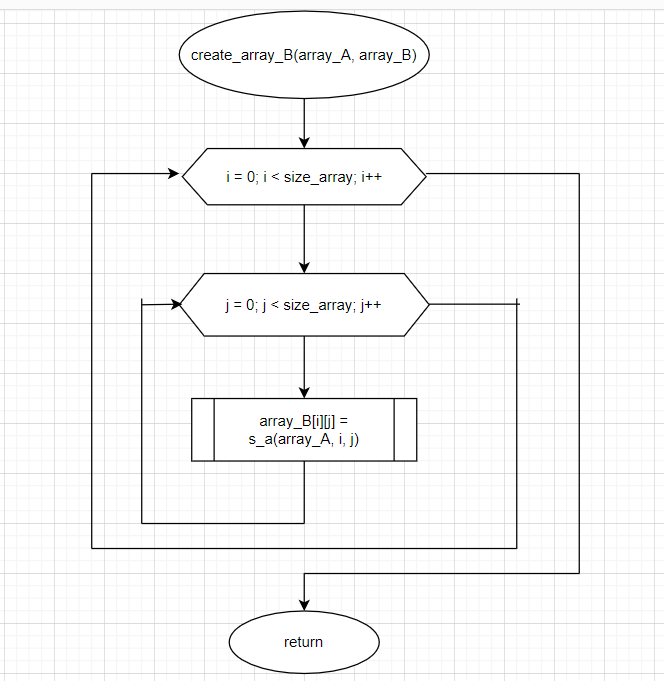


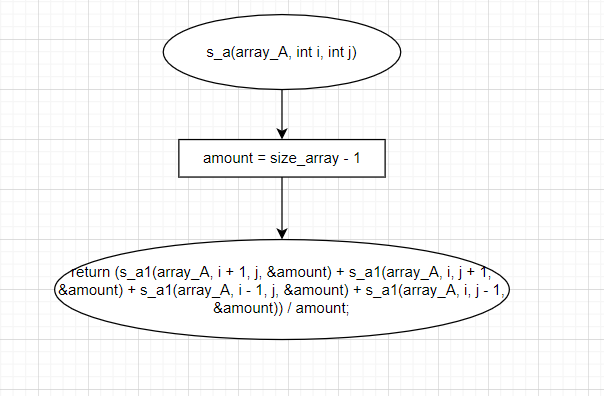
Блок-схема:

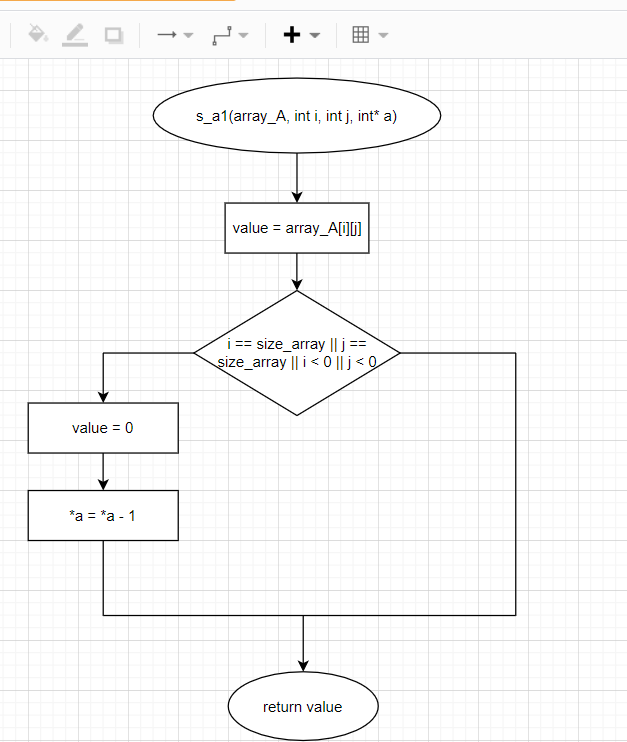


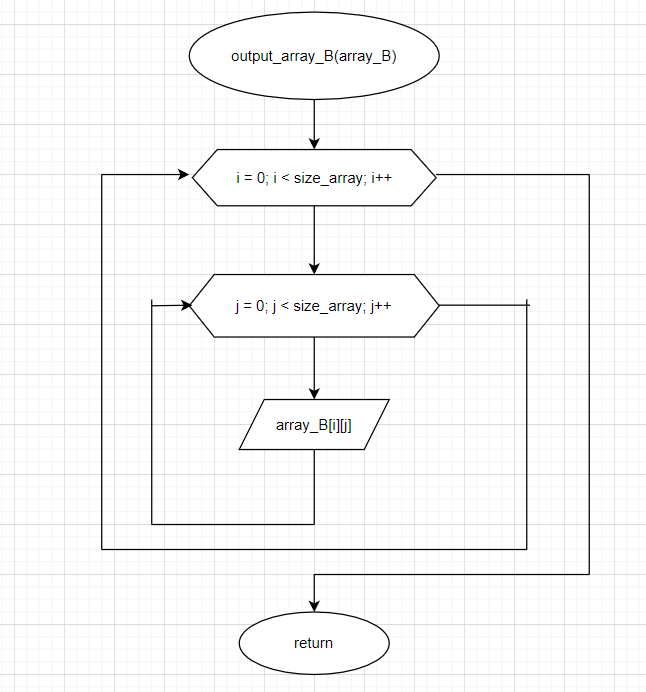












Код на С++:

#include <iostream>

#include <ctime>

#include <iomanip>

using namespace std;

int const size\_array = 5;

typedef float matrix\_A[size\_array][size\_array];

typedef float matrix\_B[size\_array][size\_array];

matrix\_A array\_A;

matrix\_B array\_B;

void fill\_array\_A(matrix\_A);

void output\_array\_A(matrix\_A);

float s\_a1(matrix\_A, int, int, int\*);

float s\_a(matrix\_A, int, int);

void create\_array\_B(matrix\_A, matrix\_B);

void output\_array\_B(matrix\_B array\_B);

int main() {

fill\_array\_A(array\_A);

output\_array\_A(array\_A);

cout << "==============================" << endl;

create\_array\_B(array\_A, array\_B);

output\_array\_B(array\_B);

system("pause");

}

void fill\_array\_A(matrix\_A array\_A) {

srand(time(NULL));

for (int i = 0; i < size\_array; i++) {

for (int j = 0; j < size\_array; j++) {

array\_A[i][j] = rand() % 10;

}

}

}

void output\_array\_A(matrix\_A array\_A) {

for (int i = 0; i < size\_array; i++) {

for (int j = 0; j < size\_array; j++) {

cout << setw(5) << array\_A[i][j];

}

cout << endl;

}

}

float s\_a1(matrix\_A array\_A, int i, int j, int\* a) {

int value = array\_A[i][j];

if (i == size\_array || j == size\_array || i < 0 || j < 0) {

value = 0;

\*a = \*a - 1;

}

return value;

}

float s\_a(matrix\_A array\_A, int i, int j) {

int amount = size\_array - 1;

return (s\_a1(array\_A, i + 1, j, &amount) + s\_a1(array\_A, i, j + 1, &amount) + s\_a1(array\_A, i - 1, j, &amount) + s\_a1(array\_A, i, j - 1, &amount)) / amount;

}

void create\_array\_B(matrix\_A array\_A, matrix\_B array\_B) {

for (int i = 0; i < size\_array; i++) {

for (int j = 0; j < size\_array; j++) {

array\_B[i][j] = s\_a(array\_A, i, j);

}

}

}

void output\_array\_B( matrix\_B array\_B) {

for (int i = 0; i < size\_array; i++) {

for (int j = 0; j < size\_array; j++) {

cout << setw(12) << array\_B[i][j] << "\t ";

}

cout << endl;

}

}

