LABORATORY WORK №5

TWO-DIMENSIONAL ARRAYS

The purpose of the work's - learn ways to work with two-dimensional arrays.

Tasks for individual performance

Given matrix enter using some data

1. Calculate the sum of of elements of the matrix A (3,5)
2. Calculate the arithmetic mean of the matrix B (3,4)
3. Change mutually elements of first column and fifth column of the matrix A (7,8)
4. Find the sum elements in column 1 and minimum element of row 2 of matrix A (13, 10)
5. Find total sum of 1 row and 2 column matrix A (8,6)
6. Find the minimum element of third row and maximum element of forth columns A (7,8)
7. Find the sum of the left half of the matrix elements of A (4,4)
8. Find the arithmetic mean of the right half of the matrix A (6,6)
9. Mutually change elements of second row and sixth row of the matrix A (7,8)
10. Find the sum of elements of the first two rows of the matrix A (6,6)
11. Find the sum of even rows of the matrix A (8,8)
12. Calculate scalar sum of second and forth rows of the matrix A (6,6).
13. Find the minimum element of the upper half of the matrix element and the minimum of the lower half of the matrix A(10,10).
14. Find the total sum of the first 3 columns and the last 2 rows of the matrix A (8,6)

15. Find the minimal elements of the top 2 rows and 3 columns of the first matrix A (8,4).

Example

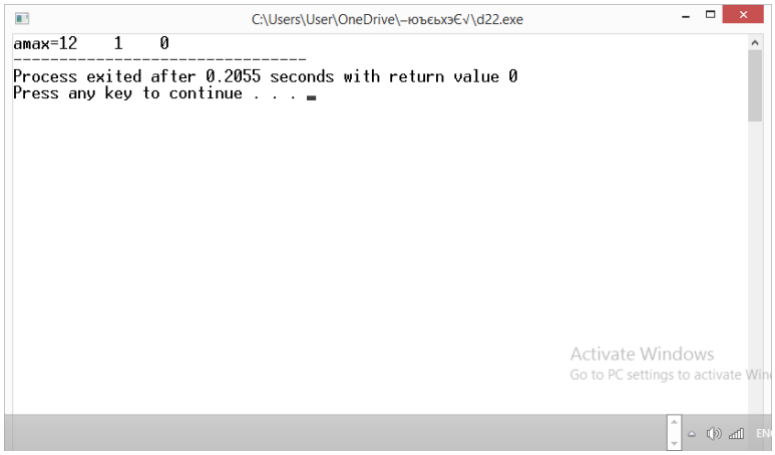
Find the sum and maximum element and their indexes of the matrix A (3,3)

```
#include <iostream>
using namespace std;
main ()
{
// LABORATORIYA work  N 5
// 606 group student Agabalayev Jafar
 int  i, j,imax,jmax;
int a [3] [3] = {{2,3,4},
                 {12,5, -7},
                 {8,10,5}};
int   amax;
amax = a [0] [0]; imax=0;jmax=0;
for (i = 0; i <3; i ++) {

for (j = 0; j <3; j ++)

if (a [i] [j ]> amax)
{
amax = a [i] [j ];
imax=i;jmax=j;
}
}
cout<<"amax="<<amax<<"    "<<imax<<"    "<<jmax
}
```

Result


C:\Users\User\OneDrive\–юъєьхэЄ√\d22.exe
amax=12 1 0
Process exited after 0.2055 seconds with return value 0
Press any key to continue . . .
Activate Windows