

LABORATORY WORK N9

PROCESSING OF OBJECTS

The goal of the work is to develop practical skills of working with objects, to study methods of constructing relations between objects, the operation of assignment, and others.

Task for self-preparation

1. Study

Section of lectures devoted to object-oriented programming;

2. Develop an algorithm for solving the problem

3. Develop a program for solving the problem.

4. Execute a program to solve the problem.

Example of solution of the problem

```
#include <iostream>
using namespace std;
#include <math.h>
class aytan {
int a;
int b;
public :
int vag1(int x1, int x2) { int f1; f1=pow(x1,x2);return(f1);}
int vag2 (int x1, int x2) { int f2;f2=pow(x1,x2);return(f2);}
} ;
aytan * x = new aytan; // dinamik
aytan * y=new aytan; // dinamik
aytan w,z ;// statik
main ()
{ int d,c,p;
int a1=2,a2=3,a3=1,a4=2,a5=3,a6=4;
c=x->vag1(a1,a2);
d=y->vag2(a3,a4);
p=w.vag1(a5,a6);
cout<< c+d+p;}
```

```

C:\Users\vagif_salimov\Documents\lab5.exe
90
-----
Process exited after 0.05938 seconds with return value 0
Press any key to continue . . . _

```

Tasks for individual work

Change the example in accordance with the data of the individual task to carry out the solution of the problem

| N | f1 | f2 | a1 | a2 | a3 | a4 | a5 | a6 |
|----|-------------------|-------------------|----|----|----|----|----|----|
| 1 | $f1=2x1-x2^2$ | $f2=3x1-x2$ | 2 | 3 | 4 | 5 | 2 | 1 |
| 2 | $f1=2x1^2-x2$ | $f2=5x1^2+x2$ | 2 | 3 | 5 | 1 | 10 | 2 |
| 3 | $f1=3x1^2-5x2$ | $f2=6x1^2+x2^2$ | 3 | 4 | 5 | 2 | 1 | 2 |
| 4 | $f1=2x1^2-7x2^2$ | $f2=12x1^2+x2$ | 2 | 3 | 1 | 4 | 3 | 2 |
| 5 | $f1=4x1^2+8x2^2$ | $f2=7x1^2+4x2$ | 1 | 3 | 3 | 3 | 2 | 2 |
| 6 | $f1=5x1^2+6x2^3$ | $f2=4x1^2+6x2$ | 2 | 4 | 3 | 1 | 3 | 2 |
| 7 | $f1=4x1^2+6x2$ | $f2=6x1^2+4x2^2$ | 5 | 3 | 3 | 4 | 2 | 2 |
| 8 | $f1=-3x1^2+7x2^2$ | $f2=7x1^2-6x2$ | 2 | 3 | 3 | 5 | 2 | 2 |
| 9 | $f1=-2x1^2+7x2^2$ | $f2=-2x1^2+6x2^2$ | 1 | 4 | 3 | 2 | 2 | 3 |
| 10 | $f1=-4x1^2+6x2^2$ | $f2=7x1^2+4x2$ | 1 | 3 | 3 | 3 | 2 | 2 |
| 11 | $f1=3x1^2-8x2^2$ | $f2=5x1^2+2x2$ | 1 | 2 | 3 | 4 | 1 | 2 |
| 12 | $f1=2x1^2-8x2^2$ | $f2=7x1^2+6x2$ | 2 | 2 | 3 | 3 | 4 | 5 |
| 13 | $f1=3x1^2-7x2^2$ | $f2=2x1^2+8x2$ | 2 | 3 | 5 | 3 | 2 | 2 |

| | | | | | | | | |
|----|-------------------|-----------------|---|---|---|---|---|---|
| 14 | $f1=4x1^2-5x2^2$ | $f2=6x1^2-4x2$ | 3 | 2 | 1 | 3 | 2 | 2 |
| 15 | $f1=-3x1^2+4x2^2$ | $f2=-2x1^2+4x2$ | 1 | 3 | 2 | 5 | 2 | 2 |