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Lab 06

# Task 1;

# Source Code:

#include<iostream>

using namespace std;

class Matrix

{

public:

int row;

int coloumn;

int \*\*ptr;

Matrix()

{

row = 0;

coloumn = 0;

ptr = NULL;

}

//void output();

void Adj();

void build()

{

ptr = new int \*[2];

for (int i = 0; i < 2; i++)

{

ptr[i] = new int[2];

}

}

void input()

{

for (int i = 0; i < 2; i++)

{

for (int j = 0; j < 2; j++)

{

cin >> ptr[i][j];

}

}

}

~Matrix()

{

for (int i = 0; i < row; i++)

delete ptr[i];

}

};

void Matrix::Adj()

{

swap(ptr[0][0], ptr[1][1]);

ptr[1][0] = (-1) \* (ptr[1][0]);

ptr[0][1] = (-1)\* (ptr[0][1]);

}

void output(int \*\*ptr)

{

for (int i = 0; i < 2; i++)

{

for (int j = 0; j < 2; j++)

{

//cout << ptr[i][j];

if (j == 1)

{

cout << ptr[i][j] << " " << endl;

}

else

cout << ptr[i][j] << " ";

}

}

}

int main()

{

cout << "Please input 2 \* 2 matrix" << endl;

Matrix object1;

object1.build();

cout << "Input Matrix" << endl;

object1.input();

cout << "Adjoint Matrix" << endl;

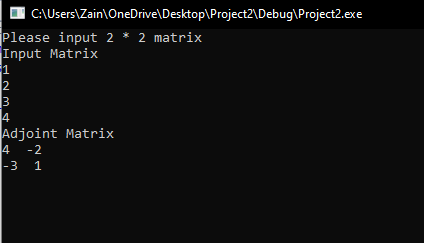
object1.Adj();

output(object1.ptr);

system("pause>0");

}

## Snip:



# Task2:

# Source code:

#include<iostream>

#include<string>

#include<iomanip>

using namespace std;

struct Date {

int day;

int month;

int year;

};

class Employee {

public:

Date DOB;

string name;

int IdNumber;

string Department;

string Position;

Employee()

{

name = "";

Position = "";

Department = "";

IdNumber=0;

}

~Employee()

{

cout << "I am a destructor" << endl;

}

void inputSet()

{

cout << "Input your name" << endl;

getline(cin,name);

cout << "Input your ID number " << endl;

cin >> IdNumber;

cin.ignore();

cout << "Input your Department" << endl;

getline(cin,Department);

cout << "Input your position" << endl;

getline(cin, Position);

}

void outputGet()

{

cout << name << setw(10) << IdNumber << setw(10) << Department << setw(10) << Position<<endl;

}

};

int main()

{ Employee object1, object2, object3;

object1.inputSet();

system("cls");

object2.inputSet();

system("cls");

object3.inputSet();

system("cls");

cout << "Name = " << setw(10) << "ID number " << setw(10) << "Department" << setw(10) << " position";

cout << endl << endl;

object1.outputGet();

object2.outputGet();

object3.outputGet();

system("pause>0");

}

## Snip:

## 

# Task 3:

# Source Code:

#include<iostream>

#include<string>

using namespace std;

class Author

{

private:

string FirstName, lastname;

public:

void setfirstName(string firstName);

void setLastName(string lastName);

Author(string firstName, string lastName)

{

FirstName = firstName;

lastname = lastName;

}

string output()

{

return FirstName;

}

string outlast()

{

return lastname;

}

};

void Author::setfirstName(string firstName)

{

cout << "Enter the first name of the Author:" << endl;

cin >> firstName;

}

void Author::setLastName(string lastName) {

cout << "Enter last Name of the Author:" << endl;

cin >> lastName;

}

int main()

{

Author a("zain", "book");

cout << "Author's First Name = " << a.output() << endl;

cout << "Author's Last Name = " << a.outlast() << endl;

system("pause>0");

}

## Snip:

