#include"stdafx.h"

#include <windows.h>

#include <iostream>

#include <cmath>

#include <windowsx.h>

using namespace std;

class Window

{

int x,y,dx,dy;

public:

Window()

{ }

Window(int x, int y, int dx, int dy)

{

this ->x=x;

this ->y=y;

this ->dx=dx;

this ->dy=dy;

POINT op;

HWND hwnd = GetConsoleWindow();

InvalidateRect(hwnd, NULL, TRUE);

UpdateWindow(hwnd);

HDC hdc = GetDC(hwnd);

SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,0,0)));

MoveToEx(hdc,x,y,&op);

LineTo(hdc,x+dx,y);

LineTo(hdc,x+dx,y+dy);

LineTo(hdc,x,y+dy);

LineTo(hdc,x,y);

}

void close\_window(int a)

{

HWND hwnd = GetConsoleWindow();

if(a==3)

{InvalidateRect(hwnd, NULL, TRUE);}

}

void expand\_window(int a)

{

if(a==2)

{

PAINTSTRUCT paint;

POINT op;

HWND hwnd = GetConsoleWindow();

HDC hdc = GetDC(hwnd);

InvalidateRect(hwnd, NULL, TRUE);

UpdateWindow(hwnd);

SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,0,0)));

int x1,y1;

float b=1.1;

float \*pb=&b;

MoveToEx(hdc,x,y,&op);

LineTo(hdc,x+2\*dx,y);

LineTo(hdc,x+2\*dx,y+2\*dy);

LineTo(hdc,x,y+2\*dy);

LineTo(hdc,x,y);

SetBkColor(hdc,15);

ReleaseDC(hwnd, hdc);

x=(\*pb)\*x;

y=(\*pb)\*y;

}

}

void moving\_window(int a)

{

if (a==1)

{

float b=1.1;

float \*pb=&b;

POINT op;

HWND hwnd = GetConsoleWindow();

InvalidateRect(hwnd, NULL, TRUE);

UpdateWindow(hwnd);

HDC hdc = GetDC(hwnd);

SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,0,0)));

MoveToEx(hdc,(\*pb)\*x,(\*pb)\*y,&op);

LineTo(hdc,(\*pb)\*x+dx,(\*pb)\*y);

LineTo(hdc,(\*pb)\*x+dx,(\*pb)\*y+dy);

LineTo(hdc,(\*pb)\*x,(\*pb)\*y+dy);

LineTo(hdc,(\*pb)\*x,(\*pb)\*y);

SetBkColor(hdc,15);

ReleaseDC(hwnd, hdc);

x=(\*pb)\*x;

y=(\*pb)\*y;

}

}

void affiliated\_window\_draw (int a)

{

if(a==4)

{

POINT op;

HWND hwnd = GetConsoleWindow();

HDC hdc = GetDC(hwnd);

SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,255)));

float b=1.1;

MoveToEx(hdc,b\*x,b\*y,&op);

LineTo(hdc,b\*x+dx/2,b\*y);

LineTo(hdc,(b\*x+dx/2),b\*y+dy/2);

LineTo(hdc,b\*x,b\*y+dy/2);

LineTo(hdc,b\*x,b\*y);

x=(b)\*x;

y=(b)\*y;

}

}

void close\_affiliated\_window (int a)

{

if(a==5)

{

POINT op;

HWND hwnd = GetConsoleWindow();

HDC hdc = GetDC(hwnd);

SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,0)));

MoveToEx(hdc,x,y,&op);

LineTo(hdc,x+dx/2,y);

LineTo(hdc,(x+dx/2),y+dy/2);

LineTo(hdc,x,y+dy/2);

LineTo(hdc,x,y);

}

}

~Window()

{

DeleteObject(CreatePen(PS\_SOLID,1,RGB(0,0,0)));

}

};

int main()

{

setlocale(LC\_ALL, "Rus");

Window rectangl(150,120,90,90);

cout<<"1-Открыть окно, поменять положение окна"<<endl;

cout<<"2-Развернуть окно"<<endl;

cout<<"3-Закрыть окно"<<endl;

cout<<"4-Создать дочернее окно"<<endl;

cout<<"5-Закрыть дочернее окно"<<endl;

for(;;)

{

int a;

cin>>a;

rectangl.close\_affiliated\_window(a);

rectangl.affiliated\_window\_draw(a);

rectangl.close\_window(a);

rectangl.expand\_window(a);

rectangl.moving\_window(a);

}

system("pause");

return 0;

}