

需要使用CMakeLists链接到opencv

draw.cpp

```
#include<iostream>
#include <opencv2/imgproc/imgproc.hpp>
#include <opencv2/highgui/highgui.hpp>
using namespace std;
int main()
{
    cv::Mat icra2021(cv::Size(850, 490), CV_8UC1, cv::Scalar::all(255));

    // 边框
    for (int i = 0; i < 21; ++i){
        for (int j = 0; j < 850; ++j){
            icra2021.at<uchar>(i, j) = 0;
            icra2021.at<uchar>(490 - i, 850 - j) = 0;
        }
    }
    for (int j = 0; j < 21; ++j){
        for (int i = 0; i < 490; ++i){
            icra2021.at<uchar>(i, j) = 0;
            icra2021.at<uchar>(490 - i, 850 - j) = 0;
        }
    }

    // 1000 x 200
    for (int i = 121; i < 141; ++i){
        for (int j = 21; j < 121; ++j){
            icra2021.at<uchar>(i, j) = 0;
            icra2021.at<uchar>(490 - i, 850 - j) = 0;
        }
    }
    for (int i = 21; i < 121; ++i){
        for (int j = 659; j < 679; ++j){
            icra2021.at<uchar>(i, j) = 0;
            icra2021.at<uchar>(490 - i, 850 - j) = 0;
        }
    }

    for (int i = 235; i < 255; ++i){
        for (int j = 171; j < 251; ++j){
            icra2021.at<uchar>(i, j) = 0;
            icra2021.at<uchar>(490 - i, 850 - j) = 0;
        }
    }

    for (int i = 115; i < 135; ++i){
        for (int j = 375; j < 475; ++j){
            icra2021.at<uchar>(i, j) = 0;
            icra2021.at<uchar>(490 - i, 850 - j) = 0;
        }
    }

    for (int i = 227; i <= 245; ++i){
        for (int j = 425; j <= 425 + i - 227; ++j){
            icra2021.at<uchar>(i, j) = 0;
            icra2021.at<uchar>(490 - i, 850 - j) = 0;
        }
    }

    for (int i = 227; i <= 245; ++i){
        for (int j = 425 - i + 227; j <= 425; ++j){
            icra2021.at<uchar>(i, j) = 0;
            icra2021.at<uchar>(490 - i, 850 - j) = 0;
        }
    }
    cv::imshow("icra2021", icra2021);
    cv::waitKey(0);
    system("pause");
    cv::imwrite("icra2021.pgm", icra2021);
    return 0;
}
```

CMakeLists.txt

cmake_minimum_required(VERSION 2.8)

```
project(draw)

set( CMAKE_CXX_FLAGS "-std=c++11" )

find_package( OpenCV REQUIRED)

include_directories( ${OpenCV_INCLUDE_DIRS} )

add_executable( draw draw.cpp )

target_link_libraries( draw ${OpenCV_LIBS})
```