#include <stdio.h>

#include <iostream>

#include <opencv2/highgui/highgui.hpp>

#include <opencv2/imgproc/imgproc.hpp>

#include <opencv2/core/core.hpp>

using namespace cv;

using namespace std;

int i,j,t,p;

void displayimage(Mat image, String windowname){

imshow(windowname, image);

}

Mat readimage(String filename)

{

return imread(filename);

}

void createimage(){

Mat temp(640, 640, CV\_8UC3, 255);

for(p=0; p<640; p+=160){

for(i=p; i<(p+80); i++){

for(t=0; t<640; t+=160){

for(j=t; j<(t+80); j++){

temp.at<Vec3b>(i,j)[2] = 0;

temp.at<Vec3b>(i,j)[1] = 0;

temp.at<Vec3b>(i,j)[0] = 0;

}

for(j=(t+80); j<(t+160); j++){

temp.at<Vec3b>(i,j)[2] = 255;

temp.at<Vec3b>(i,j)[1] = 255;

temp.at<Vec3b>(i,j)[0] = 255;

}

}

}

for(i=(p+80); i<(p+160); i++){

for(t=0; t<640; t+=160){

for(j=t; j<(t+80); j++){

temp.at<Vec3b>(i,j)[2] = 255;

temp.at<Vec3b>(i,j)[1] = 255;

temp.at<Vec3b>(i,j)[0] = 255;

}

for(j=(t+80); j<(t+160); j++){

temp.at<Vec3b>(i,j)[2] = 0;

temp.at<Vec3b>(i,j)[1] = 0;

temp.at<Vec3b>(i,j)[0] = 0;

}

}

} }

displayimage(temp, "random");

}

int main(){

createimage();

waitKey(0);

return 0;

}