演習課題 04 (04月26日）レポート

交換留学(文学部)　ES19-0013 ジョユンサン  
課題 4

基本課題４

*// Created by Jho on 26/04/2019.*

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#include <stdio.h>

#include <stdlib.h>

#include "cglec.h"

**void** PaintCircle(Image img, **int** x0, **int** y0, **int** r, **int** g)

{

**int** i, j;

**for** (i = 0; i < img.Nx; i++)

**for** (j = 0; j < img.Ny; j++)

**if** ((i - x0) \* (i - x0) + (j - y0) \* (j - y0) <= r \* r)

\* (img.Data + i \* img.Ny + j) = g;

}

**int** main(**void**)

{

**int** Nx, Ny;

printf("画像の横向ピクセル数は? "); scanf("%d", &Nx);

printf("画像の縦向ピクセル数は? "); scanf("%d", &Ny);

**unsigned** **char**\* data = (**unsigned** **char**\*)malloc(**sizeof**(**unsigned** **char**) \* Nx \* Ny);

**if** (data == **NULL**)

{

printf("ERROR");

exit(0);

}

Image img = { (**unsigned** **char**\*)data,Nx,Ny};

CglSetAll(img, 0);

PaintCircle(img, Nx / 2, Ny / 2, Nx / 5, 255);

PaintCircle(img, 0, 0, Nx / 8, 150);

PaintCircle(img, Nx / 2, Ny / 8, Nx / 6, 100);

PaintCircle(img, 5 \* Nx / 4, 3 \* Ny / 4, Nx / 2, 50);

PaintCircle(img, Nx / 2, 7 \* Ny / 4, Nx, 200);

CglSaveGrayBMP(img, "circles.bmp");

free(data);

}

  






