COMPUTER GRAPHICS [B]

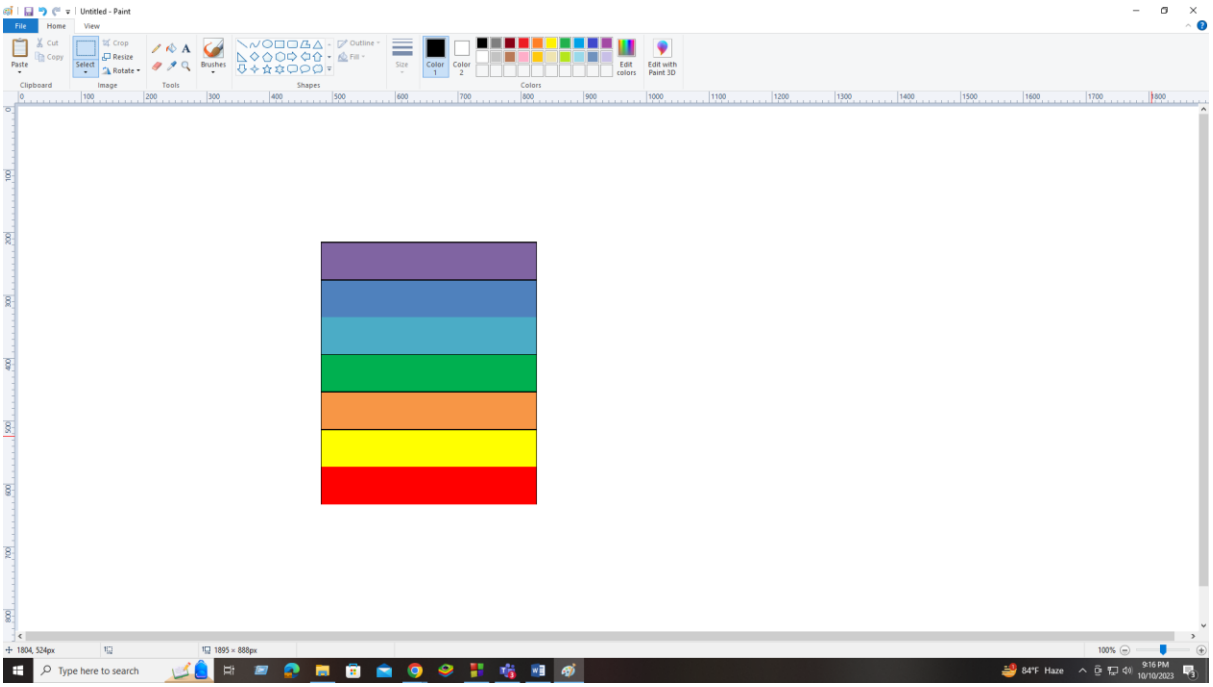
Lab Taks-2

Submission Guidelines-10.10.2023

Question- 1

Draw a Rainbow Flag

Graph Plot (Picture)-



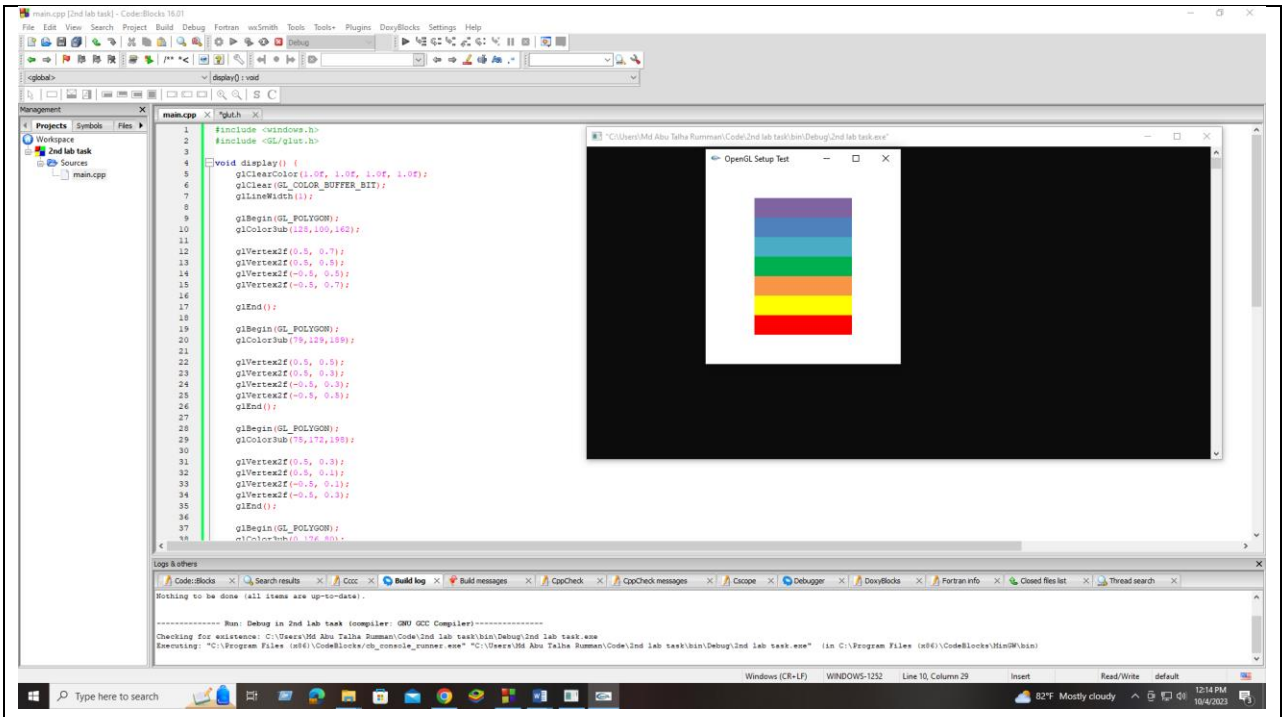
Code-

```
#include <windows.h>
#include <GL/glut.h>

void display() {
```

```
        glClearColor(1.0f, 1.0f, 1.0f, 1.0f);
        glClear(GL_COLOR_BUFFER_BIT);
        glLineWidth(1);

        glBegin(GL_POLYGON);
        glColor3ub(128,100,162);

        glVertex2f(0.5, 0.7);
        glVertex2f(0.5, 0.5);
        glVertex2f(-0.5, 0.5);
    glVertex2f(-0.5, 0.7);

        glEnd();

        glBegin(GL_POLYGON);
        glColor3ub(79,129,189);

        glVertex2f(0.5, 0.5);
        glVertex2f(0.5, 0.3);
        glVertex2f(-0.5, 0.3);
    glVertex2f(-0.5, 0.5);
        glEnd();

    glBegin(GL_POLYGON);
        glColor3ub(75,172,198);

        glVertex2f(0.5, 0.3);
        glVertex2f(0.5, 0.1);
        glVertex2f(-0.5, 0.1);
    glVertex2f(-0.5, 0.3);
        glEnd();

        glBegin(GL_POLYGON);
        glColor3ub(0,176,80);

        glVertex2f(0.5, 0.1);
        glVertex2f(0.5, -0.1);
        glVertex2f(-0.5,-0.1);
    glVertex2f(-0.5, 0.1);
        glEnd();

        glBegin(GL_POLYGON);
        glColor3ub(247,150,70);
```

```
        glVertex2f(0.5, -0.1);
        glVertex2f(0.5, -0.3);
        glVertex2f(-0.5, -0.3);
  glVertex2f(-0.5, -0.1);
        glEnd();

        glBegin(GL_POLYGON);
        glColor3ub(255,255,0);
        glVertex2f(0.5, -0.3);
        glVertex2f(0.5, -0.5);
        glVertex2f(-0.5, -0.5);
  glVertex2f(-0.5, -0.3);
        glEnd();

        glBegin(GL_POLYGON);
        glColor3ub(255, 0, 0);

        glVertex2f(0.5,- 0.5);
        glVertex2f(0.5, -0.7);
        glVertex2f(-0.5, -0.7);
  glVertex2f(-0.5, -0.5);
        glEnd();

        glEnd();

        glFlush();
}

int main(int argc, char** argv) {
        glutInit(&argc, argv);
        glutCreateWindow("OpenGL Setup Test");
        glutInitWindowSize(320, 320);
        glutDisplayFunc(display);
        glutMainLoop();
        return 0;
}
```

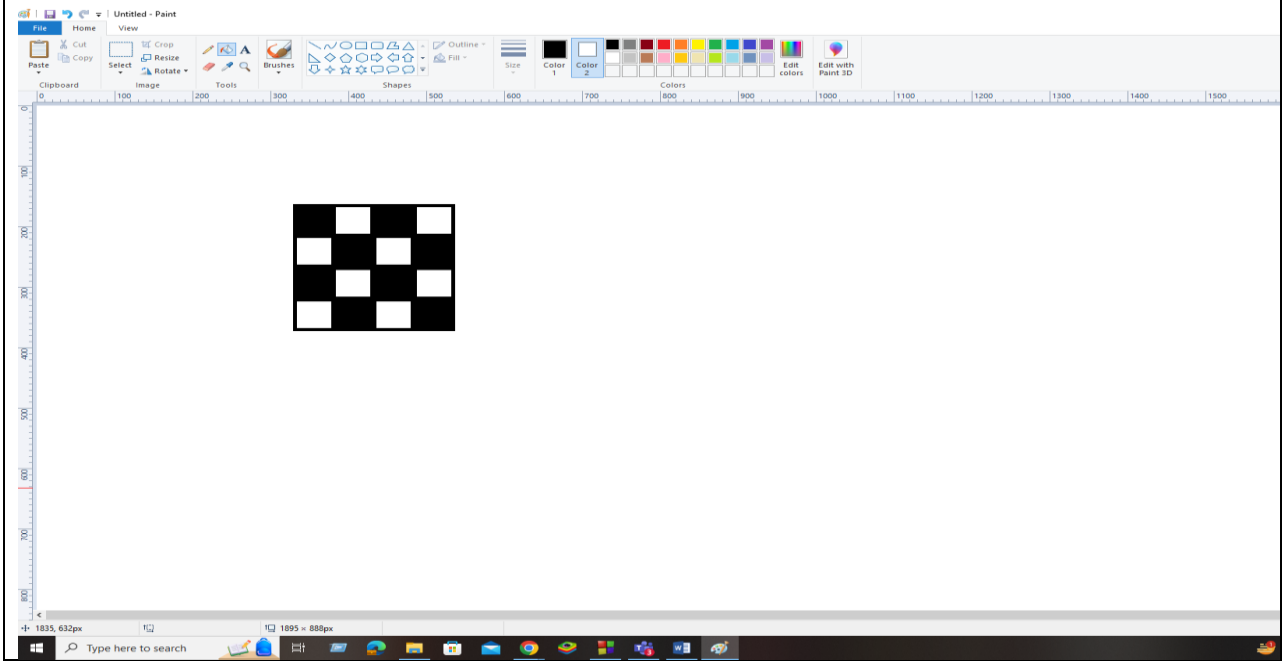
Output Screenshot (Full Screen)-



Question- 2

Draw 4X4 Chess Board

Graph Plot (Picture)-



Code-

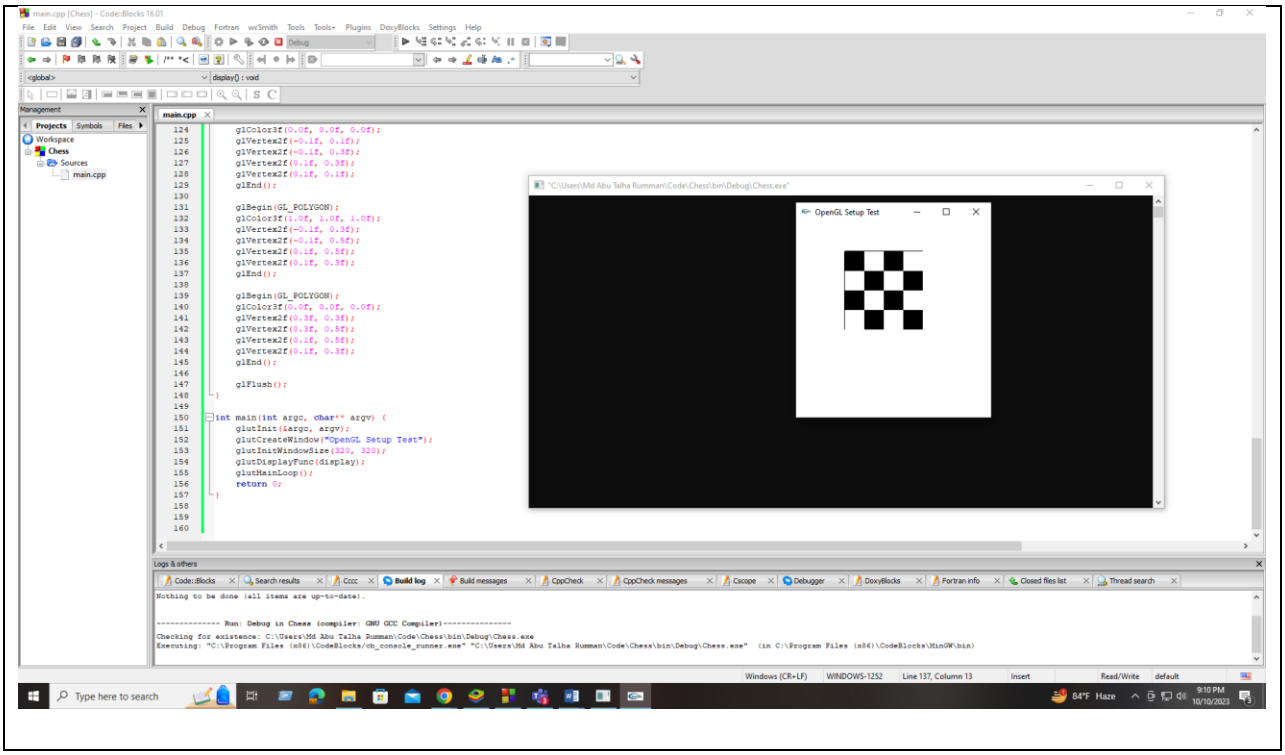
```
#include <windows.h>
#include <GL/glut.h>

void display() {
        glClearColor(1.0f, 1.0f, 1.0f, 1.0f);
        glClear(GL_COLOR_BUFFER_BIT);
        glLineWidth(1);
        glBegin(GL_LINES);
        glColor3ub(0.0f, 0.0f, 0.0f);
        glVertex2f(-0.5f, 0.7f);
        glVertex2f(0.3f, 0.7f);
        glVertex2f(-0.5f, 0.7f);
  glVertex2f(-0.5f, -0.1f);
  glVertex2f(-0.5f, -0.1f);
  glVertex2f(0.3f, -0.1f);
        glEnd();

        glBegin(GL_POLYGON);
        glColor3ub(0.0f, 0.0f, 0.0f);
        glVertex2f(-0.5f, 0.7f);
        glVertex2f(-0.5f, 0.5f);
        glVertex2f(-0.3f, 0.5f);
  glVertex2f(-0.3f, 0.7f);
        glEnd();

        glBegin(GL_POLYGON);
        glColor3f(1.0f, 1.0f, 1.0f);
        glVertex2f(-0.3f, 0.7f);
        glVertex2f(-0.3f, 0.5f);
        glVertex2f(-0.1f, 0.5f);
  glVertex2f(-0.1f, 0.7f);
        glEnd();

  glBegin(GL_POLYGON);
        glColor3ub(0.0f, 0.0f, 0.0f);
        glVertex2f(-0.1f, 0.7f);
        glVertex2f(-0.1f, 0.5f);
        glVertex2f(0.1f, 0.5f);
  glVertex2f(0.1f, 0.7f);
        glEnd();

        glBegin(GL_POLYGON);
```

```
        glColor3f(1.0f, 1.0f, 1.0f);
        glVertex2f(0.1f, 0.7f);
        glVertex2f(0.1f, 0.5f);
        glVertex2f(0.3f, 0.5f);
    glVertex2f(0.3f, 0.7f);
        glEnd();
    glBegin(GL_POLYGON);
        glColor3f(1.0f, 1.0f, 1.0f);

        glVertex2f(-0.5f, 0.5f);
        glVertex2f(-0.5f, 0.3f);
        glVertex2f(-0.3f, 0.3f);
    glVertex2f(-0.3f, 0.5f);
        glEnd();

    glBegin(GL_POLYGON);
        glColor3ub(0.0f, 0.0f, 0.0f);
        glVertex2f(-0.5f, 0.3f);
        glVertex2f(-0.5f, 0.1f);
        glVertex2f(-0.3f, 0.1f);
    glVertex2f(-0.3f, 0.3f);
        glEnd();

    glBegin(GL_POLYGON);
        glColor3f(1.0f, 1.0f, 1.0f);

        glVertex2f(-0.5f, 0.1f);
        glVertex2f(-0.5f, -0.1f);
        glVertex2f(-0.3f, -0.1f);
    glVertex2f(-0.3f, 0.1f);
        glEnd();

    glBegin(GL_POLYGON);
        glColor3f(0.0f, 0.0f, 0.0f);
        glVertex2f(-0.3f, 0.5f);
        glVertex2f(-0.3f, 0.3f);
        glVertex2f(-0.1f, 0.3f);
    glVertex2f(-0.1f, 0.5f);
        glEnd();

    glBegin(GL_POLYGON);
        glColor3f(1.0f, 1.0f, 1.0f);
        glVertex2f(-0.3f, 0.3f);
        glVertex2f(-0.3f, 0.1f);
```

```
        glVertex2f(-0.1f, 0.1f);
glVertex2f(-0.1f, 0.3f);
        glEnd();

glBegin(GL_POLYGON);
        glColor3f(0.0f, 0.0f, 0.0f);
        glVertex2f(-0.3f, 0.1f);
        glVertex2f(-0.3f, -0.1f);
        glVertex2f(-0.1f, -0.1f);
glVertex2f(-0.1f, 0.1f);
        glEnd();

glBegin(GL_POLYGON);
        glColor3f(1.0f, 1.0f, 1.0f);
        glVertex2f(-0.1f, 0.1f);
        glVertex2f(-0.1f, -0.1f);
        glVertex2f(0.1f, -0.1f);
glVertex2f(0.1f, 0.1f);
        glEnd();

glBegin(GL_POLYGON);
        glColor3f(0.0f, 0.0f, 0.0f);
        glVertex2f(0.1f, 0.1f);
        glVertex2f(0.1f, -0.1f);
        glVertex2f(0.3f, -0.1f);
glVertex2f(0.3f, 0.1f);
        glEnd();

glBegin(GL_POLYGON);
        glColor3f(1.0f, 1.0f, 1.0f);
        glVertex2f(0.1f, 0.1f);
        glVertex2f(0.1f, 0.3f);
        glVertex2f(0.3f, 0.3f);
glVertex2f(0.3f, 0.1f);
        glEnd();

glBegin(GL_POLYGON);
        glColor3f(0.0f, 0.0f, 0.0f);
        glVertex2f(-0.1f, 0.1f);
        glVertex2f(-0.1f, 0.3f);
        glVertex2f(0.1f, 0.3f);
glVertex2f(0.1f, 0.1f);
        glEnd();
```

```
   glBegin(GL_POLYGON);
        glColor3f(1.0f, 1.0f, 1.0f);
        glVertex2f(-0.1f, 0.3f);
        glVertex2f(-0.1f, 0.5f);
        glVertex2f(0.1f, 0.5f);
   glVertex2f(0.1f, 0.3f);
        glEnd();

   glBegin(GL_POLYGON);
        glColor3f(0.0f, 0.0f, 0.0f);
        glVertex2f(0.3f, 0.3f);
        glVertex2f(0.3f, 0.5f);
        glVertex2f(0.1f, 0.5f);
   glVertex2f(0.1f, 0.3f);
        glEnd();

        glFlush();
}

int main(int argc, char** argv) {
        glutInit(&argc, argv);
        glutCreateWindow("OpenGL Setup Test");
        glutInitWindowSize(320, 320);
        glutDisplayFunc(display);
        glutMainLoop();
        return 0;
}
```

Output Screenshot (Full Screen)-


main.cpp [Chess] - Code::Blocks 16.01
OpenGL Setup Test
Type here to search

Question- 3

Create the batman logo given below-

Graph Plot (Picture)-

(Not Needed)

```
Code-#include<GL/gl.h>
#include <GL/glut.h>

void myDisplay(void)
{
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(40,200);
glVertex2i(59,200);
glVertex2i(59,219);
glVertex2i(40,219);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(40,220);
glVertex2i(59,220);
glVertex2i(59,239);
glVertex2i(40,239);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(40,240);
glVertex2i(59,240);
glVertex2i(59,259);
glVertex2i(40,259);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(40,260);
glVertex2i(59,260);
glVertex2i(59,279);
glVertex2i(40,279);
```

```
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(40,280);
glVertex2i(59,280);
glVertex2i(59,299);
glVertex2i(40,299);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(60,160);
glVertex2i(79,160);
glVertex2i(79,179);
glVertex2i(60,179);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(60,180);
glVertex2i(79,180);
glVertex2i(79,199);
glVertex2i(60,199);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(60,300);
glVertex2i(79,300);
glVertex2i(79,319);
glVertex2i(60,319);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(80,140);
glVertex2i(99,140);
glVertex2i(99,159);
glVertex2i(80,159);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(80,320);
glVertex2i(99,320);
glVertex2i(99,339);
glVertex2i(80,339);
glEnd();
glColor3ub (255, 255, 0);
```

```
glBegin(GL_QUADS);
glVertex2i(100,120);
glVertex2i(119,120);
glVertex2i(119,139);
glVertex2i(100,139);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(100,340);
glVertex2i(119,340);
glVertex2i(119,359);
glVertex2i(100,359);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(120,100);
glVertex2i(139,100);
glVertex2i(139,119);
glVertex2i(120,119);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(120,360);
glVertex2i(139,360);
glVertex2i(139,379);
glVertex2i(120,379);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(140,80);
glVertex2i(159,80);
glVertex2i(159,99);
glVertex2i(140,99);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(140,380);
glVertex2i(159,380);
glVertex2i(159,399);
glVertex2i(140,399);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(160,60);
```

```
glVertex2i(179,60);
glVertex2i(179,79);
glVertex2i(160,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(160,400);
glVertex2i(179,400);
glVertex2i(179,419);
glVertex2i(160,419);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(180,60);
glVertex2i(199,60);
glVertex2i(199,79);
glVertex2i(180,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(180,400);
glVertex2i(199,400);
glVertex2i(199,419);
glVertex2i(180,419);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(180,420);
glVertex2i(199,420);
glVertex2i(199,439);
glVertex2i(180,439);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(200,60);
glVertex2i(219,60);
glVertex2i(219,79);
glVertex2i(200,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(200,340);
glVertex2i(219,340);
glVertex2i(219,359);
```

```
glVertex2i(200,359);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(200,360);
glVertex2i(219,360);
glVertex2i(219,379);
glVertex2i(200,379);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(200,400);
glVertex2i(219,400);
glVertex2i(219,419);
glVertex2i(200,419);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(200,420);
glVertex2i(219,420);
glVertex2i(219,439);
glVertex2i(200,439);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(220,60);
glVertex2i(239,60);
glVertex2i(239,79);
glVertex2i(220,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(220,80);
glVertex2i(239,80);
glVertex2i(239,99);
glVertex2i(220,99);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(220,100);
glVertex2i(239,100);
glVertex2i(239,119);
glVertex2i(220,119);
glEnd();
```

```
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(220,320);
glVertex2i(239,320);
glVertex2i(239,339);
glVertex2i(220,339);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(220,340);
glVertex2i(239,340);
glVertex2i(239,359);
glVertex2i(220,359);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(220,360);
glVertex2i(239,360);
glVertex2i(239,379);
glVertex2i(220,379);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(220,400);
glVertex2i(239,400);
glVertex2i(239,419);
glVertex2i(220,419);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(220,420);
glVertex2i(239,420);
glVertex2i(239,439);
glVertex2i(220,439);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(240,60);
glVertex2i(259,60);
glVertex2i(259,79);
glVertex2i(240,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
```

```
glVertex2i(240,320);
glVertex2i(259,320);
glVertex2i(259,339);
glVertex2i(240,339);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(240,340);
glVertex2i(259,340);
glVertex2i(259,359);
glVertex2i(240,359);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(240,360);
glVertex2i(259,360);
glVertex2i(259,379);
glVertex2i(240,379);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(240,380);
glVertex2i(259,380);
glVertex2i(259,399);
glVertex2i(240,399);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(240,400);
glVertex2i(259,400);
glVertex2i(259,419);
glVertex2i(240,419);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(240,420);
glVertex2i(259,420);
glVertex2i(259,439);
glVertex2i(240,439);
glEnd();
glColor3ub (0, 0, 0);
glBegin(GL_QUADS);
glVertex2i(240,440);
glVertex2i(259,440);
```

```
glVertex2i(259,459);
glVertex2i(240,459);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(260,60);
glVertex2i(279,60);
glVertex2i(279,79);
glVertex2i(260,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(260,340);
glVertex2i(279,340);
glVertex2i(279,359);
glVertex2i(260,359);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(260,360);
glVertex2i(279,360);
glVertex2i(279,379);
glVertex2i(260,379);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(260,380);
glVertex2i(279,380);
glVertex2i(279,399);
glVertex2i(260,399);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(260,400);
glVertex2i(279,400);
glVertex2i(279,419);
glVertex2i(260,419);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(260,420);
glVertex2i(279,420);
glVertex2i(279,439);
glVertex2i(260,439);
```

```
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(280,60);
glVertex2i(299,60);
glVertex2i(299,79);
glVertex2i(280,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(280,420);
glVertex2i(299,420);
glVertex2i(299,439);
glVertex2i(280,439);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(300,60);
glVertex2i(319,60);
glVertex2i(319,79);
glVertex2i(300,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(300,420);
glVertex2i(319,420);
glVertex2i(319,439);
glVertex2i(300,439);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(320,60);
glVertex2i(339,60);
glVertex2i(339,79);
glVertex2i(320,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(320,420);
glVertex2i(339,420);
glVertex2i(339,439);
glVertex2i(320,439);
glEnd();
glColor3ub (255, 255, 0);
```

```
glBegin(GL_QUADS);
glVertex2i(340,60);
glVertex2i(359,60);
glVertex2i(359,79);
glVertex2i(340,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(340,420);
glVertex2i(359,420);
glVertex2i(359,439);
glVertex2i(340,439);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(360,60);
glVertex2i(379,60);
glVertex2i(379,79);
glVertex2i(360,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(360,80);
glVertex2i(379,80);
glVertex2i(379,99);
glVertex2i(360,99);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(360,100);
glVertex2i(379,100);
glVertex2i(379,119);
glVertex2i(360,119);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(360,420);
glVertex2i(379,420);
glVertex2i(379,439);
glVertex2i(360,439);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(380,60);
```

```
glVertex2i(399,60);
glVertex2i(399,79);
glVertex2i(380,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(380,80);
glVertex2i(399,80);
glVertex2i(399,99);
glVertex2i(380,99);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(380,100);
glVertex2i(399,100);
glVertex2i(399,119);
glVertex2i(380,119);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(380,120);
glVertex2i(399,120);
glVertex2i(399,139);
glVertex2i(380,139);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(380,340);
glVertex2i(399,340);
glVertex2i(399,359);
glVertex2i(380,359);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(380,360);
glVertex2i(399,360);
glVertex2i(399,379);
glVertex2i(380,379);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(380,380);
glVertex2i(399,380);
glVertex2i(399,399);
```

```
glVertex2i(380,399);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(380,400);
glVertex2i(399,400);
glVertex2i(399,419);
glVertex2i(380,419);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(380,420);
glVertex2i(399,420);
glVertex2i(399,439);
glVertex2i(380,439);
glEnd();
glColor3ub (0, 0, 0);
glBegin(GL_QUADS);
glVertex2i(400,40);
glVertex2i(419,40);
glVertex2i(419,59);
glVertex2i(400,59);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(400,60);
glVertex2i(419,60);
glVertex2i(419,79);
glVertex2i(400,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(400,320);
glVertex2i(419,320);
glVertex2i(419,339);
glVertex2i(400,339);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(400,340);
glVertex2i(419,340);
glVertex2i(419,359);
glVertex2i(400,359);
glEnd();
```

```
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(400,360);
glVertex2i(419,360);
glVertex2i(419,379);
glVertex2i(400,379);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(400,400);
glVertex2i(419,400);
glVertex2i(419,419);
glVertex2i(400,419);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(400,420);
glVertex2i(419,420);
glVertex2i(419,439);
glVertex2i(400,439);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(420,60);
glVertex2i(439,60);
glVertex2i(439,79);
glVertex2i(420,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(420,320);
glVertex2i(439,320);
glVertex2i(439,339);
glVertex2i(420,339);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(420,340);
glVertex2i(439,340);
glVertex2i(439,359);
glVertex2i(420,359);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
```

```
glVertex2i(420,360);
glVertex2i(439,360);
glVertex2i(439,379);
glVertex2i(420,379);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(420,400);
glVertex2i(439,400);
glVertex2i(439,419);
glVertex2i(420,419);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(420,420);
glVertex2i(439,420);
glVertex2i(439,439);
glVertex2i(420,439);
glEnd();
glColor3ub (0, 0, 0);
glBegin(GL_QUADS);
glVertex2i(420,440);
glVertex2i(439,440);
glVertex2i(439,459);
glVertex2i(420,459);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(440,60);
glVertex2i(459,60);
glVertex2i(459,79);
glVertex2i(440,79);
glEnd();
glColor3ub (0, 0, 0);
glBegin(GL_QUADS);
glVertex2i(440,260);
glVertex2i(459,260);
glVertex2i(459,279);
glVertex2i(440,279);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(440,320);
glVertex2i(459,320);
```

```
glVertex2i(459,339);
glVertex2i(440,339);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(440,340);
glVertex2i(459,340);
glVertex2i(459,359);
glVertex2i(440,359);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(440,360);
glVertex2i(459,360);
glVertex2i(459,379);
glVertex2i(440,379);
glEnd();
glColor3ub (0, 0, 0);
glBegin(GL_QUADS);
glVertex2i(440,380);
glVertex2i(459,380);
glVertex2i(459,399);
glVertex2i(440,399);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(440,400);
glVertex2i(459,400);
glVertex2i(459,419);
glVertex2i(440,419);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(440,420);
glVertex2i(459,420);
glVertex2i(459,439);
glVertex2i(440,439);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(460,60);
glVertex2i(479,60);
glVertex2i(479,79);
glVertex2i(460,79);
```

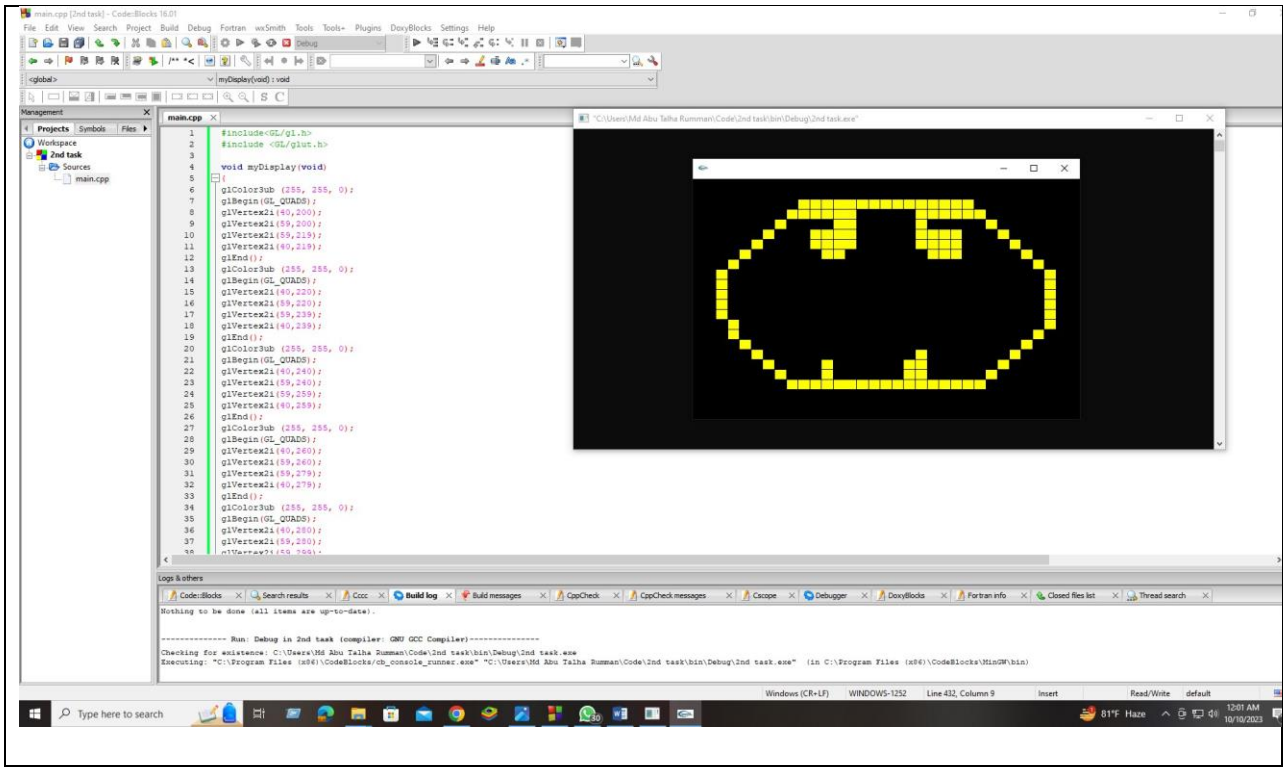
```
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(460,400);
glVertex2i(479,400);
glVertex2i(479,419);
glVertex2i(460,419);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(460,420);
glVertex2i(479,420);
glVertex2i(479,439);
glVertex2i(460,439);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(480,60);
glVertex2i(499,60);
glVertex2i(499,79);
glVertex2i(480,79);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(480,400);
glVertex2i(499,400);
glVertex2i(499,419);
glVertex2i(480,419);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(500,80);
glVertex2i(519,80);
glVertex2i(519,99);
glVertex2i(500,99);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(500,380);
glVertex2i(519,380);
glVertex2i(519,399);
glVertex2i(500,399);
glEnd();
glColor3ub (255, 255, 0);
```

```
glBegin(GL_QUADS);
glVertex2i(520,100);
glVertex2i(539,100);
glVertex2i(539,119);
glVertex2i(520,119);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(520,360);
glVertex2i(539,360);
glVertex2i(539,379);
glVertex2i(520,379);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(540,120);
glVertex2i(559,120);
glVertex2i(559,139);
glVertex2i(540,139);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(540,340);
glVertex2i(559,340);
glVertex2i(559,359);
glVertex2i(540,359);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(560,140);
glVertex2i(579,140);
glVertex2i(579,159);
glVertex2i(560,159);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(560,320);
glVertex2i(579,320);
glVertex2i(579,339);
glVertex2i(560,339);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(580,160);
```

```
glVertex2i(599,160);
glVertex2i(599,179);
glVertex2i(580,179);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(580,300);
glVertex2i(599,300);
glVertex2i(599,319);
glVertex2i(580,319);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(600,180);
glVertex2i(619,180);
glVertex2i(619,199);
glVertex2i(600,199);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(600,200);
glVertex2i(619,200);
glVertex2i(619,219);
glVertex2i(600,219);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(600,220);
glVertex2i(619,220);
glVertex2i(619,239);
glVertex2i(600,239);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(600,240);
glVertex2i(619,240);
glVertex2i(619,259);
glVertex2i(600,259);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(600,260);
glVertex2i(619,260);
glVertex2i(619,279);
```

```
glVertex2i(600,279);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(600,280);
glVertex2i(619,280);
glVertex2i(619,299);
glVertex2i(600,299);
glEnd();

glFlush ();
}

void myInit (void)
{
glClearColor(250.0, 250.0, 250.0, 0.0);
glMatrixMode(GL_PROJECTION);
glLoadIdentity();
gluOrtho2D(0.0, 660.0, 0.0, 480.0);
}


int main(int argc, char** argv)
{
glutInit(&argc, argv);
glutInitDisplayMode (GLUT_SINGLE | GLUT_RGB);
glutInitWindowSize (580, 360);
glutInitWindowPosition (250, 250);
glutCreateWindow ("");
glutDisplayFunc(myDisplay);
myInit ();
glutMainLoop();
}
```

Output Screenshot (Full Screen)-


main.cpp [2nd task] - Code::Blocks 16.01
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
Management
Projects Symbols Files
Workspace
2nd task
Sources
main.cpp
main.cpp
#include<GL/gl.h>
#include <GL/glut.h>
void myDisplay(void)
{
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(40,200);
glVertex2i(59,200);
glVertex2i(59,219);
glVertex2i(40,219);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(40,220);
glVertex2i(59,220);
glVertex2i(59,239);
glVertex2i(40,239);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(40,240);
glVertex2i(59,240);
glVertex2i(59,259);
glVertex2i(40,259);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(40,260);
glVertex2i(59,260);
glVertex2i(59,279);
glVertex2i(40,279);
glEnd();
glColor3ub (255, 255, 0);
glBegin(GL_QUADS);
glVertex2i(40,280);
glVertex2i(59,280);
"C:\Users\Md Abu Talha Rumman\Code\2nd task\bin\Debug\2nd task.exe"
Logs & others
Code::Blocks
Search results
Cccc
Build log
Build messages
CppCheck
CppCheck messages
Cscope
Debugger
DoxyBlocks
Fortran info
Closed files list
Thread search
Nothing to be done (all items are up-to-date).
---------- Run: Debug in 2nd task (compiler: GNU GCC Compiler)----------
Checking for existence: C:\Users\Md Abu Talha Rumman\Code\2nd task\bin\Debug\2nd task.exe
Executing: "C:\Program Files (x86)\CodeBlocks/cb_console_runner.exe" "C:\Users\Md Abu Talha Rumman\Code\2nd task\bin\Debug\2nd task.exe" (in C:\Program Files (x86)\CodeBlocks\MinGW\bin)
Windows (CR+LF)
WINDOWS-1252
Line 432, Column 9
Insert
Read/Write
default
Type here to search
81°F Haze
12:01 AM
10/10/2023