



**Daffodil**  
*International*  
**University**

## **Lab Report**

**Course Title:** Computer Graphics Lab

**Course Code:** CSE422

**Name of the Report:** Draw a house

### **Submitted By:**

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## Code:

```
#include <GL/gl.h>

#include <GL/glut.h>

void display(void)
{
    /* clear all pixels */

    glClear (GL_COLOR_BUFFER_BIT);

    /* draw white polygon (rectangle) with corners at
    * (0.25, 0.25, 0.0) and (0.75, 0.75, 0.0)
    */

    glColor3f (1.0, 1.0, 0.8);

        glBegin(GL_POLYGON); //Begin triangle coordinates

            //square

            glVertex2f(0.1f, 0.1f );
            glVertex2f(0.9f, 0.1f );
            glVertex2f(0.9f, 0.5f );
            glVertex2f(0.1f, 0.5f );

        glEnd();

////////////////////////////////////

    //triangle

    glColor3f (0.7, 0.0, 0.0);

        glBegin(GL_POLYGON);

            glVertex2f(0.01f, 0.5f );
            glVertex2f(1.0f, 0.5f );
            glVertex2f(0.5f, 0.9f );
```

```
glEnd();  
////////////////////////////////////
```

```
////////////////////////////////////
```

```
//door
```

```
glColor3f (0.5, 0.9, 0.3);
```

```
glBegin(GL_POLYGON);
```

```
glVertex2f(0.4f, 0.1f );
```

```
glVertex2f(0.6f, 0.1f );
```

```
glVertex2f(0.6f, 0.4f );
```

```
glVertex2f(0.4f, 0.4f );
```

```
glEnd();
```

```
////////////////////////////////////
```

```
////////////////////////////////////
```

```
//window1
```

```
glColor3f (0.0, 0.5, 1.0);
```

```
glBegin(GL_POLYGON);
```

```
glVertex2f(0.2f, 0.3f );
```

```
glVertex2f(0.35f, 0.3f );
```

```
glVertex2f(0.35f, 0.4f );
```

```
glVertex2f(0.2f, 0.4f );
```

```
glEnd();
```

```
////////////////////////////////////
```

```
////////////////////////////////////
```

```
//window2
```

```
glColor3f (0.0, 0.5, 1.0);

glBegin(GL_POLYGON);

    glVertex2f(0.65f, 0.3f );
    glVertex2f(0.8f, 0.3f );
    glVertex2f(0.8f, 0.4f );
    glVertex2f(0.65f, 0.4f );

glEnd();

////////////////////////////////////////////////////////////////
```

```
    //End triangle coordinates

/* don't wait!

* start processing buffered OpenGL routines

*/

glFlush ();
```

```

}

void init (void)
{
/* select clearing (background) color */
glClearColor (0.0, 0.0, 0.0, 0.0);

/* initialize viewing values */
glMatrixMode(GL_PROJECTION);
glLoadIdentity();
glOrtho(0.0, 1.0, 0.0, 1.0, -10.0, 10.0);
}

/*
* Declare initial window size, position, and display mode
* (single buffer and RGBA). Open window with "hello"
* in its title bar. Call initialization routines.
* Register callback function to display graphics.
* Enter main loop and process events.
*/

int main(int argc, char** argv)
{
glutInit(&argc, argv);
glutInitDisplayMode (GLUT_SINGLE | GLUT_RGB);
glutInitWindowSize (600, 600);
glutInitWindowPosition (100, 100);
glutCreateWindow ("SYEED MD TOWAHA(192-15-13126)");
init ();
glutDisplayFunc(display);
glutMainLoop();
return 0; /* ISO C requires main to return int. */
}

```

**Output:**

