

```
#include<windows.h>
```

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

```
#include <stdio.h>
```

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

```
void init(void)
```

```
{
```

```
    glClearColor(0.0,0.0,0.0,0.0);
```

```
    glMatrixMode(GL_PROJECTION);
```

```
    glLoadIdentity();
```

```
    glOrtho(0.0, 40.0, 0.0, 30.0, -1.0, 1.0);
```

```
    //gluOrtho2D(0.0,300.0,0.0,300.0);
```

```
}
```

```
void Draw()
```

```
{
```

```
    glClear(GL_COLOR_BUFFER_BIT);
```

```
    //code
```

```
    glBegin(GL_QUADS);
```

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

```
    //Trapezoid
```

```
    glVertex3f(3.0f, 13.0f, 0.0f);
```

```
    glVertex3f(12.0f, 13.0f, 0.0f);
```

```
    glVertex3f(12.0f, 20.0f, 0.0f);
```

```
    glVertex3f(3.0f, 20.0f, 0.0f);
```

```
glEnd();
```

```
glBegin(GL_POLYGON);
```

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

```
//Pentagon
```

```
    glVertex3f(22.0f, 15.0f, 0.0f);
```

```
    glVertex3f(25.0f, 15.0f, 0.0f);
```

```
    glVertex3f(26.0f, 17.0f, 0.0f);
```

```
    glVertex3f(25.0f, 19.0f, 0.0f);
```

```
    glVertex3f(22.0f, 19.0f, 0.0f);
```

```
    glVertex3f(21.0f, 17.0f, 0.0f);
```

```
glEnd();
```

```
glBegin(GL_POLYGON);
```

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

```
//Trapezoid
```

```
glVertex3f(4.0f, 4.0f, 0.0f);
```

```
glVertex3f(13.0f, 4.0f, 0.0f);
```

```
glVertex3f(13.0f, 11.0f, 0.0f);
```

```
glVertex3f(4.0f, 11.0f, 0.0f);
```

```
glVertex3f(4.0f, 7.0f, 0.0f);
```

```
glEnd();
```

```
glBegin(GL_QUADS);
```

```
glColor3f(1.0f,1.0f,1.0f);
```

```
//Trapezoid
```

```
glVertex3f(2.0f, 3.0f, 0.0f);
```

```
glColor3f(0.2f,0.2f,0.2f);
```

```
glVertex3f(8.0f, 3.0f, 0.0f);
```

```
glColor3f(1.0f,1.0f,1.0f);
```

```
glVertex3f(8.0f, 7.5f, 0.0f);
```

```
glColor3f(0.2f,0.2f,0.2f);
```

```
glVertex3f(2.0f, 7.5f, 0.0f);
```

```
glEnd();
```

```
glBegin(GL_POLYGON);
```

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

```
//Pentagon
```

```
    glVertex3f(24.0f, 6.0f, 0.0f);
```

```
    glVertex3f(21.0f, 9.0f, 0.0f);
```

```
    glVertex3f(17.0f, 3.5f, 0.0f);
```

```
        glVertex3f(23.0f, 3.5f, 0.0f);
        //glVertex3f(30.0f, 14.0f, 0.0f);

    glEnd();

    glBegin(GL_TRIANGLES);

    glColor3f(0.0,0.0,1.0);

    //Triangle

    glVertex3f(24.0f, 1.0f, 0.0f);
    glColor3f(0.0, 1.0, 0.0);
    glVertex3f(28.0f, 6.0f, 0.0f);
    glColor3f(1.0, 0.0, 0.0);
    glVertex3f(20.0f, 6.0f, 0.0f);

    glEnd();

    glutSwapBuffers();
}

int main(int argc,char **argv)
{
```

```

glutInit(&argc,argv);

glutInitDisplayMode ( GLUT_RGB | GLUT_DOUBLE );

glutInitWindowPosition(0,0);

glutInitWindowSize(500,500);

glutCreateWindow("Lab Task");

init();

glutDisplayFunc(Draw);

glutMainLoop();

return 0;

}

```

## Output:

