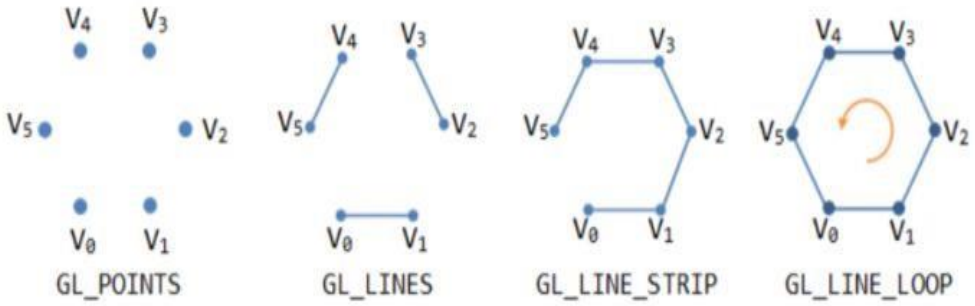
U18CO018
Shubham Shekhaliya
Computer Graphics
Assignment-4

✓ **Write a program to draw the following shapes:**

1. **Points (individual points)**
2. **Lines (pairs of vertices interpreted as individual line segments)**
3. **Line Strip (series of connected line segments)**
4. **Line Loop (same as above, with a segment added between last and first vertices)**

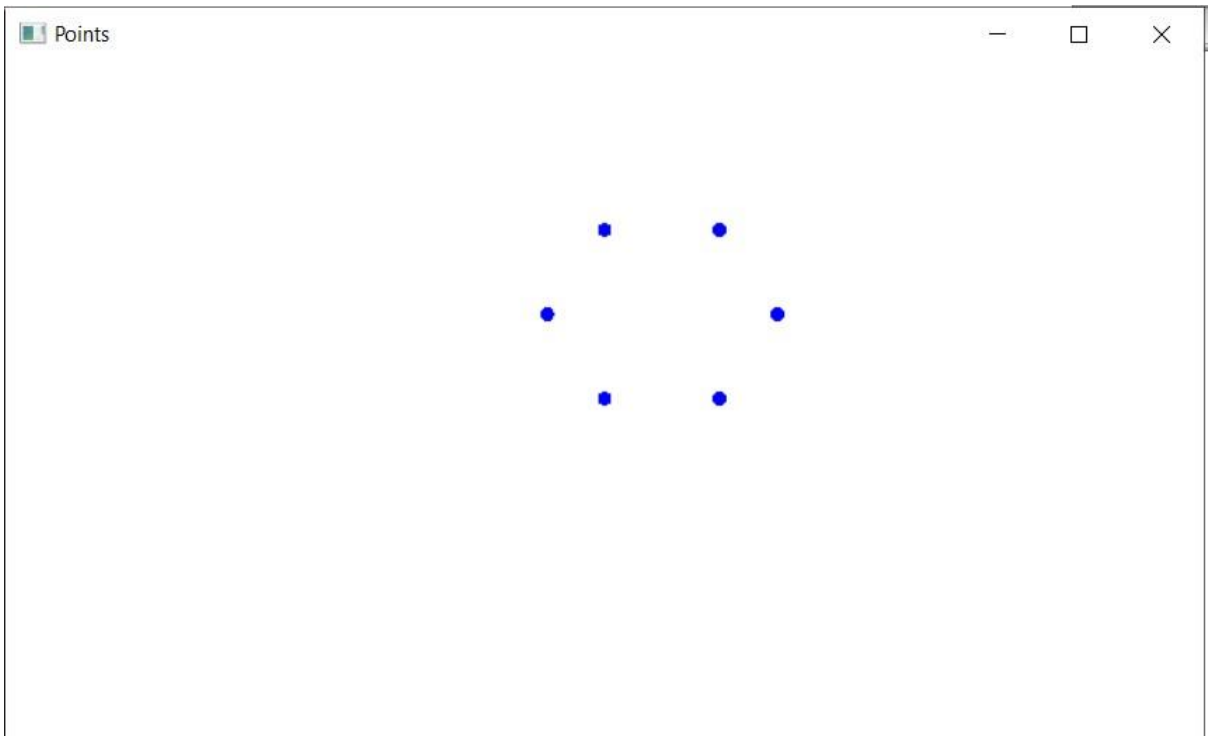


Code:-

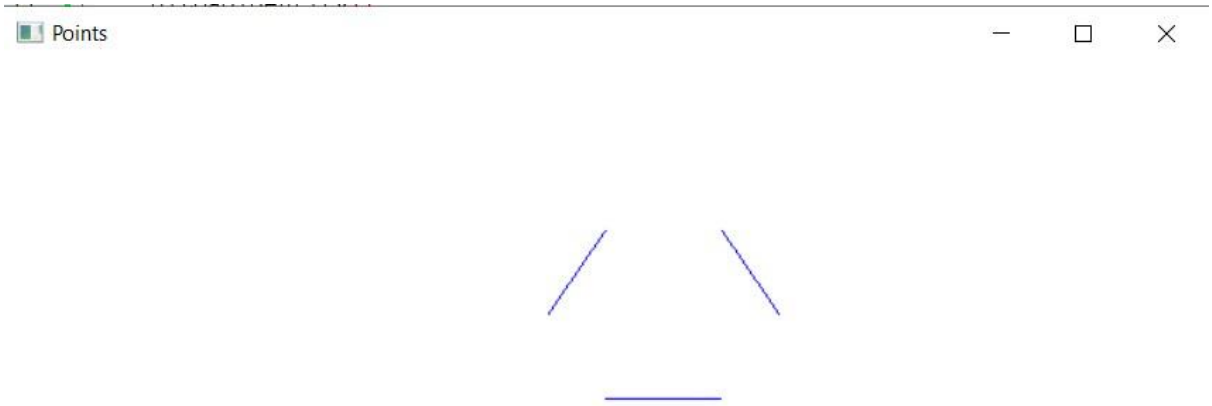
```
#include<windows.h>
#include<stdio.h>
#include<GL/glut.h>
#include<math.h>
void init() {
        glClearColor(1.0, 1.0, 1.0, 1.0);
        glColor3f(0.0, 0.0, 1.0);
        glPointSize(7.0);
        glMatrixMode(GL_PROJECTION);
        glLoadIdentity();
        gluOrtho2D(-780, 780, -420, 420);
}
void display()  {
        glClear(GL_COLOR_BUFFER_BIT);
        glEnable(GL_POINT_SMOOTH);
        glBegin(GL_LINE_LOOP); // Change argument for different shapes
```

```
        glVertex2f(0, 0);
        glVertex2f(150, 0);
        glVertex2f(225, 105);
        glVertex2f(150, 210);
        glVertex2f(0, 210);
        glVertex2f(-75, 105);
        glEnd();
        glFlush();
}
int main (int argc, char** argv) {
        glutInit(&argc, argv);
        glutInitDisplayMode(GLUT_SINGLE | GLUT_RGB);
        glutInitWindowSize(683, 384);
        glutInitWindowPosition(0, 0);
        glutCreateWindow("Points");
        init();
        glutDisplayFunc(display);
        glutMainLoop();
        return 0;
}
```

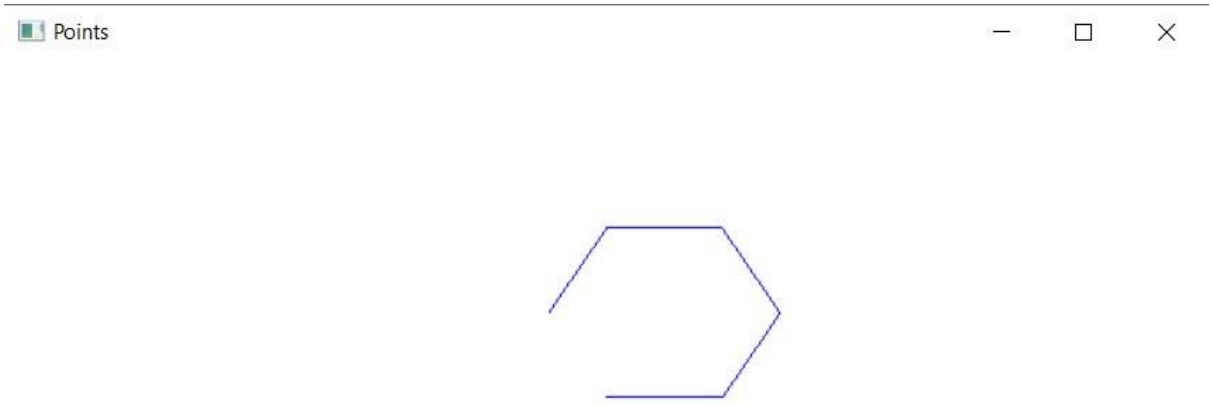
- GL_POINTS



- GL_LINES



- GL_LINE_STRIP



- GL_LINE_LOOP