Resize Window

Code:

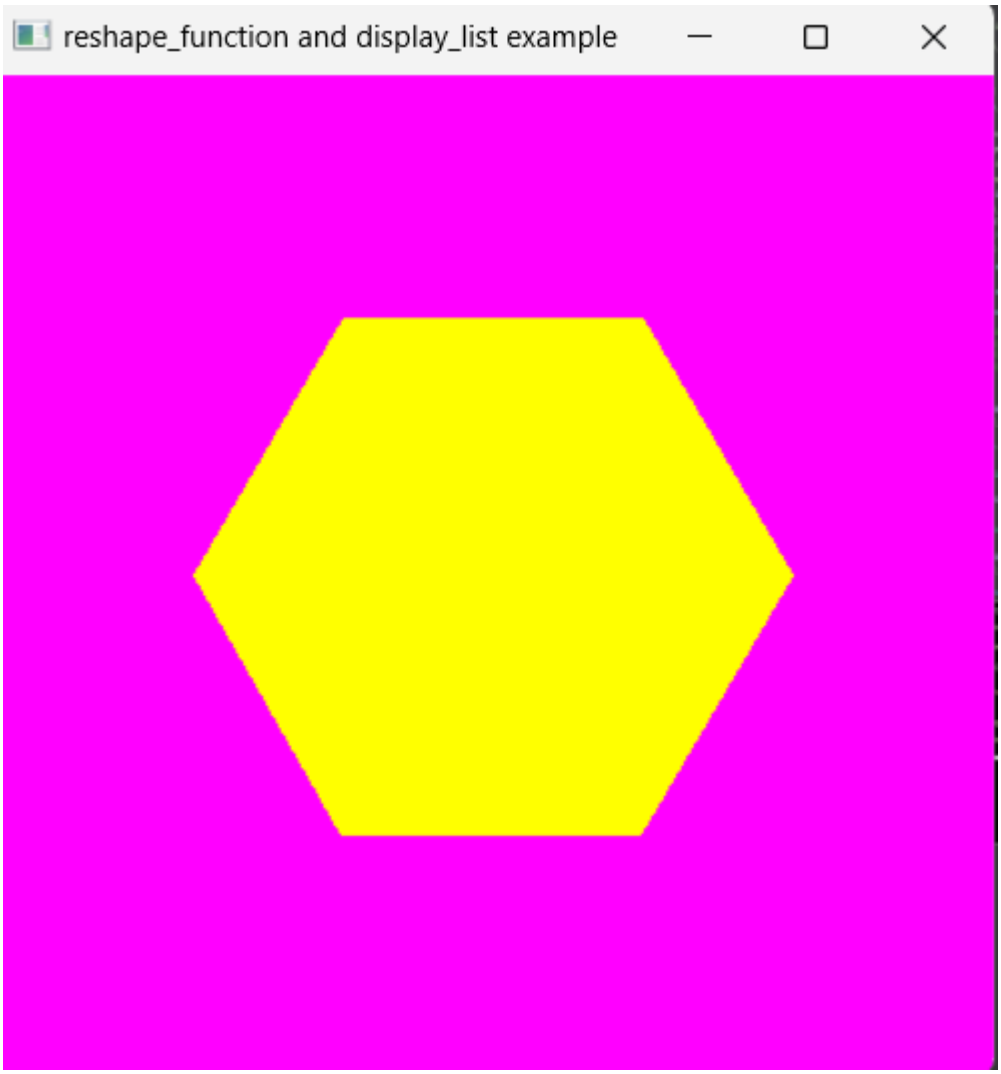
```
#include<GL/glut.h>
#include<math.h>
#include<stdlib.h>
const double TWO_PI = 6.2831853;
GLsizei winwidth = 400, winheight = 400;
GLint reghex;
class screenpt {
public:GLint x, y;
};
static void init(void)
{
screenpt hexvertex, circtr;
GLdouble theta;
GLint k;
circtr.x = winwidth / 2;
circtr.y = winheight / 2;
```

```
glClearColor(1.0, 0.0, 1.0, 0.0);
reghex = glGenLists(1);
glNewList(reghex, GL_COMPILE);
glColor3f(1.0, 1.0, 0.0);
glBegin(GL_POLYGON);
for (k = 0; k < 6; k++)
{
theta = TWO_PI * k / 6;
hexvertex.x = circtr.x + 120 * cos(theta);
hexvertex.y = circtr.y + 120 * sin(theta);
glVertex2i(hexvertex.x, hexvertex.y);
}
/*glVertex2i(110,110);
glVertex2i(180,110);
glVertex2i(180,160);
glVertex2i(110,160);*/
glEnd();
glEndList();
```

```
}
void reghexagon(void)
{
glClear(GL_COLOR_BUFFER_BIT);
glCallList(reghex);
glFlush();
}
void winReshapeFcn(int newwidth, int newheight)
{
glViewport(0, 0, (GLsizei)newwidth,
(GLsizei)newheight);
glMatrixMode(GL_PROJECTION);
glLoadIdentity();
gluOrtho2D(0.0, (GLdouble)newwidth, 0.0,
(GLdouble)newheight);
glClear(GL_COLOR_BUFFER_BIT);
glCallList(reghex);
glFlush();
```

```
}
void main(int argc, char** argv)
{
glutInit(&argc, argv);
glutInitDisplayMode(GLUT_SINGLE | GLUT_RGB);
glutInitWindowPosition(100, 100);
glutInitWindowSize(winwidth, winheight);
glutCreateWindow("reshape_function and display_list example");
init();
glutDisplayFunc(reghexagon);
glutReshapeFunc(winReshapeFcn);
glutMainLoop();
}
```

Output:


reshape_function and display_list example


reshape_function and display_list example