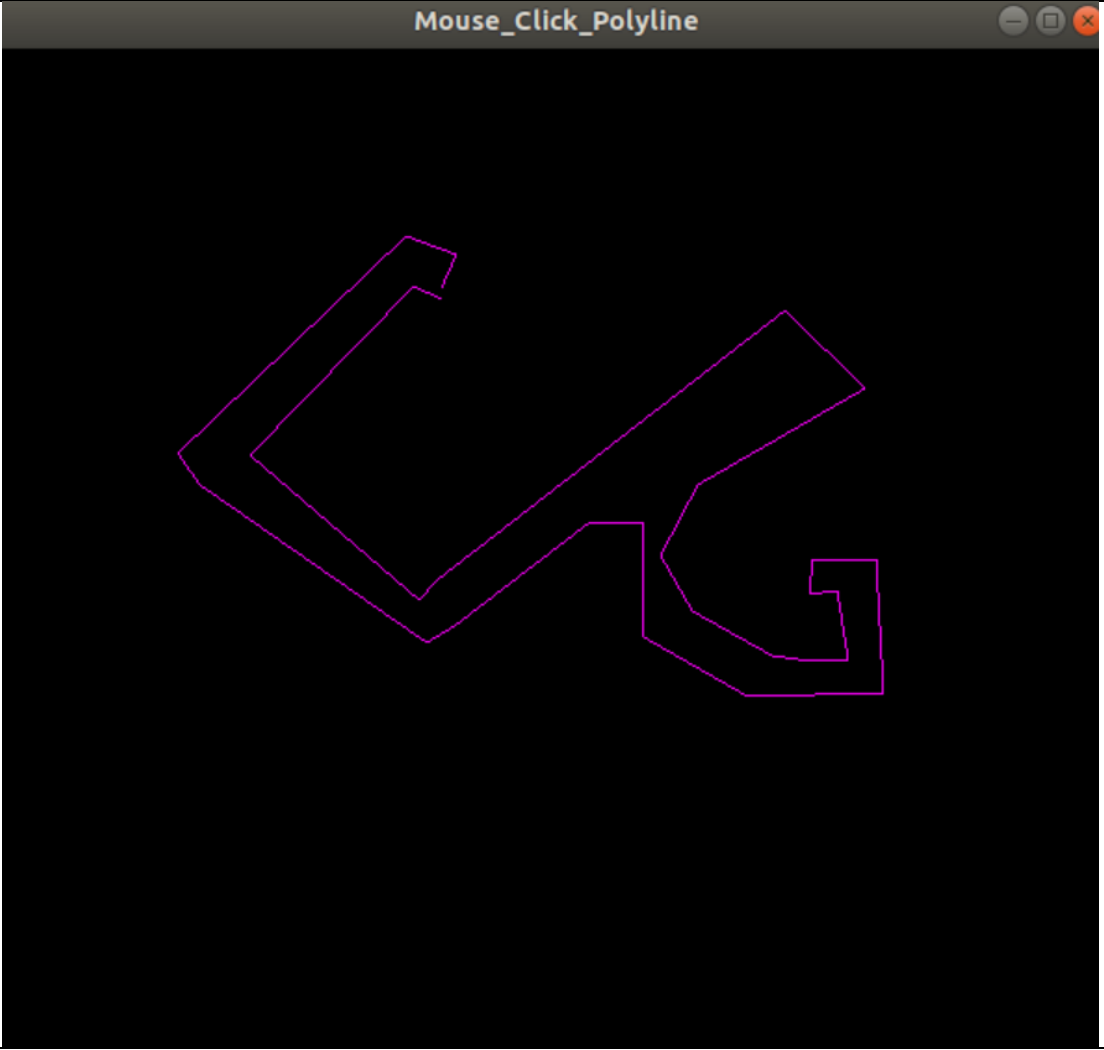


Name : Shawn Louis		Batch : B	Roll No : 31
EXPERIMENT 10			
Title	MOUSE INTERACTION IN OPENGL		
Objective	To write a C program for Mouse Interaction.		
Program	<pre> #include<GL/glut.h> struct base{ GLint x; GLint y; }b[2]; int flag=0; GLint screen_height=600; GLint screen_width=600; void free_dots(void){ glClear(GL_COLOR_BUFFER_BIT); glFlush(); } void line(GLint x1, GLint y1, GLint x2, GLint y2){ glBegin(GL_LINE_STRIP); glColor3f(1.0,0.0,1.0); glVertex2d(x1,y1); glVertex2d(x2,y2); glEnd(); glFlush(); } void reshape(GLsizei w, GLsizei h){ screen_width=w; screen_height=h; glMatrixMode(GL_PROJECTION); glLoadIdentity(); gluOrtho2D(0,w,0,h); glViewport(0,0,w,h); } void poly(GLint x, GLint y){ b[flag].x=x; b[flag].y=y; flag+=1; if(flag==2){ line(b[0].x,b[0].y,b[1].x,b[1].y); b[0].x=b[1].x; b[0].y=b[1].y; b[1].x=0; b[1].y=0; flag-=1; } } void my_mouse(int button, int state, int x, int y){ if((button==GLUT_LEFT_BUTTON) && (state==GLUT_DOWN)){ </pre>		

	<pre> poly(x,screen_height - y); } else if((button==GLUT_RIGHT_BUTTON)&&(state==GLUT_DOWN)){ flag=0; glClear(GL_COLOR_BUFFER_BIT); glFlush(); } } void init(){ glClearColor(1.0f,1.0f,1.0f,0.0f); glColor3f(0.0f,0.0f,0.0f); glPointSize(8); glMatrixMode(GL_PROJECTION); glLoadIdentity(); gluOrtho2D(0,screen_width,0,screen_height); } int main(int argc,char **argv){ glutInit(&argc,argv); glutInitWindowSize(600,600); glutInitWindowPosition(60,60); glutInitDisplayMode(GLUT_SINGLE GLUT_RGB); glutCreateWindow("Mouse_Click_Polyline"); glutDisplayFunc(free_dots); glutMouseFunc(my_mouse); glutReshapeFunc(reshape); init(); glutMainLoop(); return 0; } </pre>
Output	<pre> shawn@shawn-VirtualBox:~/Desktop\$ gedit MouseInteraction.c shawn@shawn-VirtualBox:~/Desktop\$ gcc MouseInteraction.c -lglut -lGLU -lGL shawn@shawn-VirtualBox:~/Desktop\$./a.out shawn@shawn-VirtualBox:~/Desktop\$ █ </pre>

	 <p>The screenshot shows a window titled "Mouse_Click_Polyline" with standard OS window controls (minimize, maximize, close). The window contains a black rectangular area. Inside this area, a purple line has been drawn to form a stylized, blocky letter 'G'. The 'G' is composed of several connected line segments, giving it a hand-drawn or pixelated appearance. The window is positioned on a white background.</p>
Conclusion	Thus a C program to generate Mouse Interaction was written and executed.