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EXPERIMENT 10		
Title	**MOUSE INTERACTION IN OPENGL**	
Objective	To write a C program for Mouse Interaction.	

Program	#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)){	

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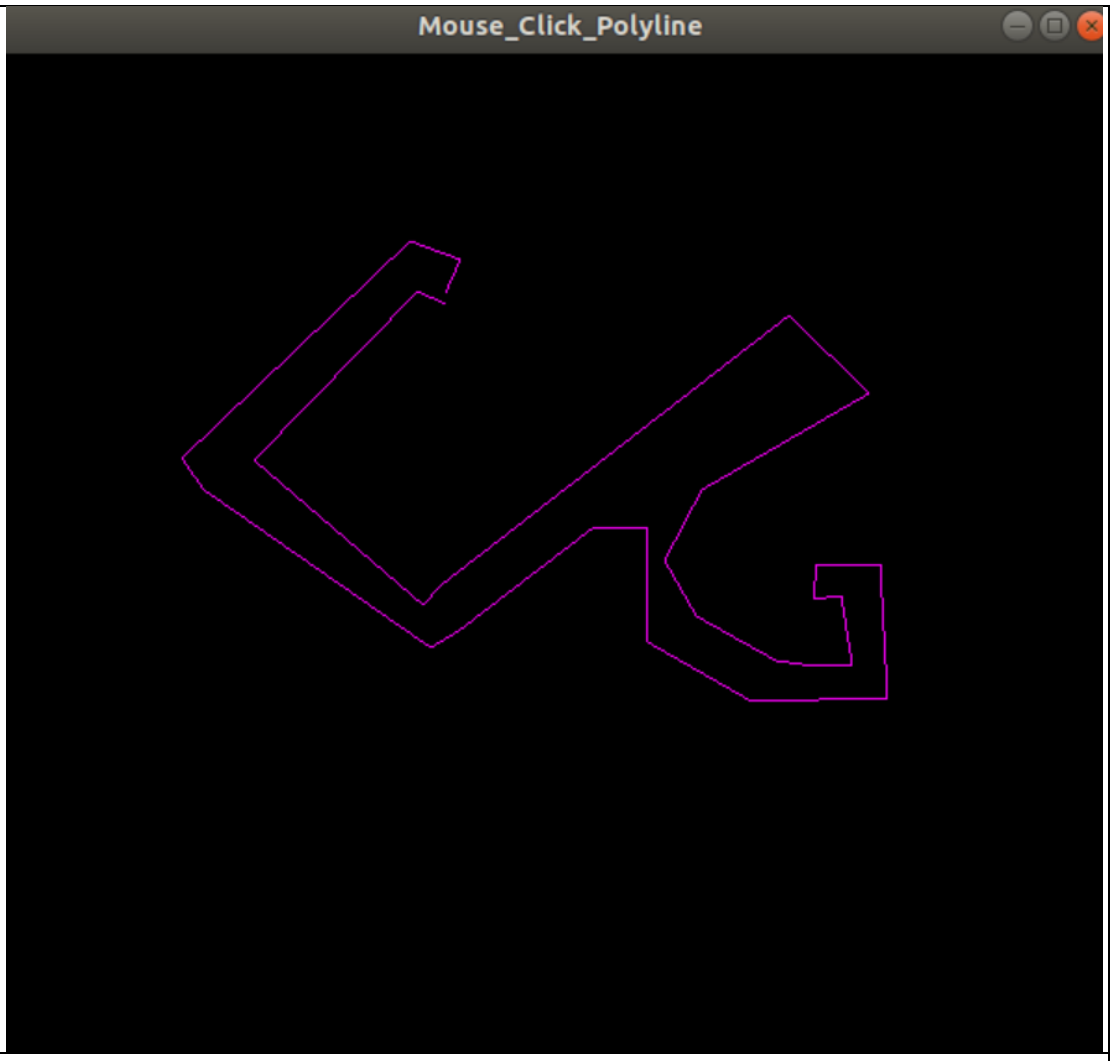
poly(x,screen_height - y);
}
else if((button==GLUT_RIGHT_BUTTON)&&(state==GLUT_DOWN)){
flag=0;
glClear(GL_COLOR_BUFFER_BIT);
glFlush();
}
}
void init(){
glClearColor(1.0f,1.0f,1.0f,0.0f);
glColor3f(0.0f,0.0f,0.0f);
glPointSize(8);
glMatrixMode(GL_PROJECTION);
glLoadIdentity();
gluOrtho2D(0,screen_width,0,screen_height);
}
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;
}
```

Output

	
Conclusion	Thus a C program to generate Mouse Interaction was written and executed.