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#include <iostream>
#include <math.h>
#include <time.h>
#include <GL/glut.h>
using namespace std;
int x=0;
int flag=0;
void init(){
glClearColor(1.0,1.0,1.0,0.0);
glMatrixMode(GL_PROJECTION);
gluOrtho2D(0,640,0,480);
}
void object1(){
glClear(GL_COLOR_BUFFER_BIT);
glColor3f(1,0,0);
glBegin(GL_POLYGON);
glVertex2i(x,220);
glVertex2i(x+40,220);
glVertex2i(x+40,260);
glVertex2i(x,260);
glEnd();
glutSwapBuffers();
}
void timer(int){
glutPostRedisplay();
glutTimerFunc(1000/60,timer,0);
if(flag == 0){
x = x+3;
}
if(flag == 1){
x = x-3;
}
if(x==600){
flag = 1;
}
if(x == 0){
flag = 0;
}
}
int main(int argc, char** argv){
glutInit(&argc, argv);
glutInitDisplayMode(GLUT_DOUBLE | GLUT_RGB);
glutInitWindowSize(640,480);
glutInitWindowPosition(200,200);
glutCreateWindow("Animation");
init();
glutDisplayFunc(object1);
glutTimerFunc(1000,timer,0);
glutMainLoop();
return 0;
}

```

```
digvijay@digvijay-Aspire-A715-51G:~/Desktop$ g++ CGA8.cpp -lglut -lGL -lGLEW -lGLU -o CGA8
digvijay@digvijay-Aspire-A715-51G:~/Desktop$ ./CGA8
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