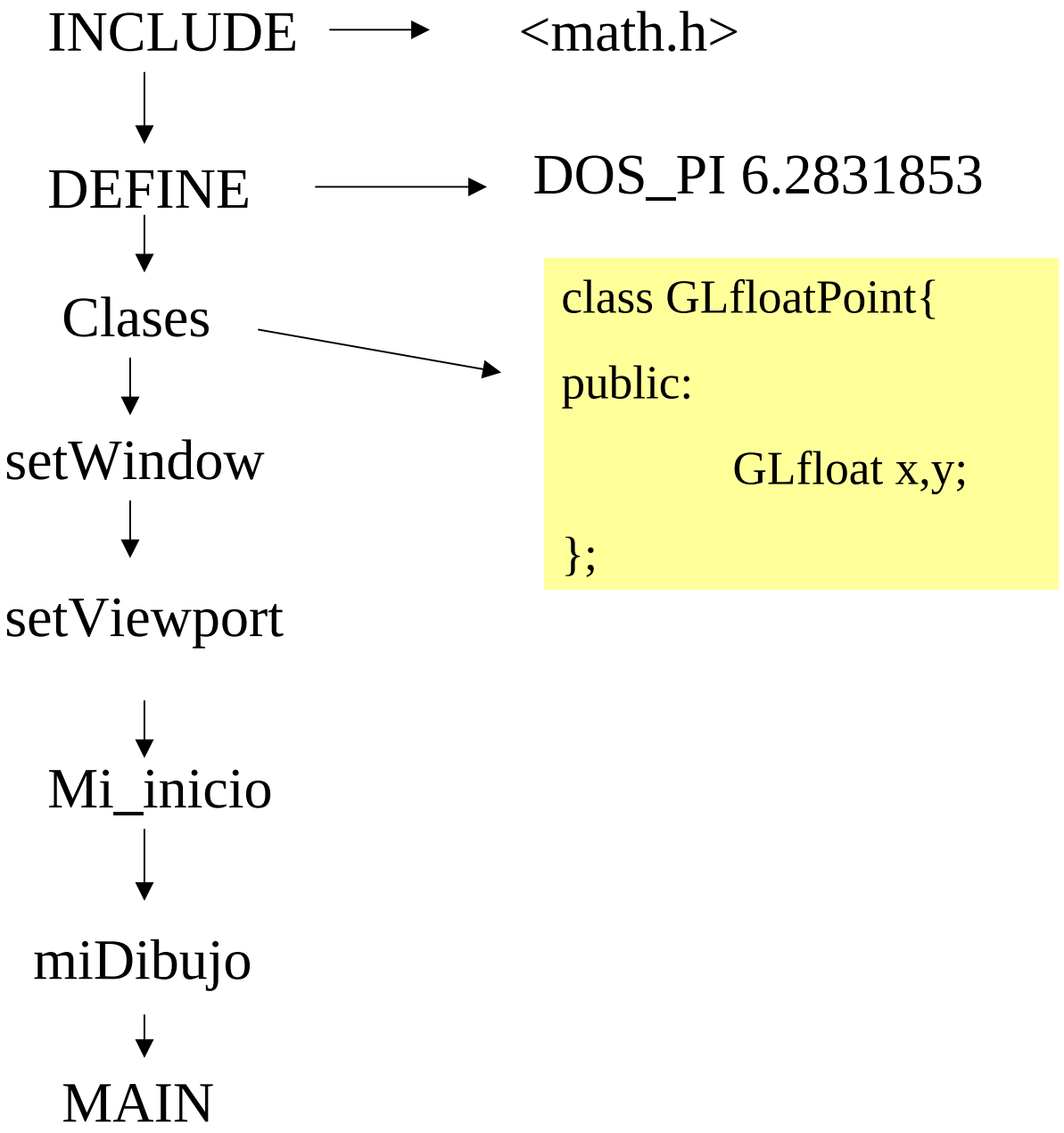
Prácitca 3_7


INCLUDE
<math.h>
DEFINE
DOS_PI 6.2831853
Clases
class GLfloatPoint{
public:
GLfloat x,y;
};
setWindow
setViewport
Mi_inicio
miDibujo
MAIN

```
void miDibujo(void)
{
GLfloatPoint C;
GLfloatPoint centro[5]={
{-70.0f,-30.0f},{-8.0f,0.0f},{40.0f,-30.0f},{55.0f,-30.0f},{-50.0f,45.0f}
                                    };
            GLfloat theta=0.0f,dtheta;
            GLfloat a[5]= { {5.0f},{20.0f},{30.0f},{30.0f},{40.0f}};
            GLfloat b = -7.0f;
            GLint i;
            GLdouble r;
            glClear(GL_COLOR_BUFFER_BIT);          // Limpia la ventana
```

```
//Generacion de las curvas paramétrica
            for(i=0;i<5;i++)        {
            glBegin(GL_LINE_STRIP);
            dtheta = 1.0f/(float) a[i];
            theta =0.0f;
            while (theta <= DOS_PI+dtheta){
            switch(i){
            case (0): { r = a[i] * theta;                  glColor3f(1.0f,0.0f,0.0f);} break;
            case (1): { r = a[i] * cos (theta) + b;      glColor3f(0.0f,1.0f,0.0f);} break;
            case (2): { r = a[i] * (1 + cos (theta));    glColor3f(0.0f,0.0f,1.0f);} break;
            case (3): { r = a[i] * cos (3 * theta);      glColor3f(0.0f,0.8f,1.0f);} break;
            case (4): { r = a[i] * cos (2 * theta);      glColor3f(0.0f,0.0f,0.0f);} break;
                                                  }
            C.x = ( centro[i].x + r *  cos (theta) );
            C.y = ( centro[i].y + r *  sin (theta) );
                                    glVertex2f(C.x, C.y);
                                    theta += dtheta;
                        }  glEnd();
            } glFlush();     }
```