Gamal Abdul Hameed Nasef Newysar	19015550
----------------------------------	----------

## Code Flow:

### In the setup() function:

the background color is set to white, and the drawDDA() and drawBresenham() functions are called to draw the lines of the name. Then, a vertex array object (VAO) is generated and bound to the first index of the vao[] array. A buffer is also generated and bound to the first index of the buffer[] array.

## The drawDDA() function:

draws lines using the DDA algorithm. It defines points that make up the letters "G", first "A" and "L" and calculates the coordinates of the points using the DDA algorithm. The coordinates and colors of the points are stored in the global vertices and colors vectors.

#### The drawBresenham() function:

does the same thing but uses the Bresenham algorithm to draw the letters "M" and second "A".

After the vertices and colors are calculated, they are stored in the buffer using glBufferData() and glBufferSubData(). The glVertexPointer() and glColorPointer() functions are used to specify the format of the vertex and color data in the buffer.

#### The animate() function:

is called to animate the name "Gamal" by rotating it around the z-axis. The glutTimerFunc() function is used to register the animate() function to be called repeatedly at a specified interval.

# Screenshot:

