# Assignment

- Develop an optimized algorithm to render a triangle without using any graphics library.

OR

- Develop a piglit test case to render a triangle using fragment shader.
    - Send vertex data to draw a full screen black colored rectangle.
    For example: piglit_width = 400, piglit_height = 200
    - Draw a red triangle inside the black rectangle
    screen coordinates = { {200, 180}, {100, 40}, {300, 40} }
    - Use gl_FragCoord.x and gl_FragCoord.y in fragment shader
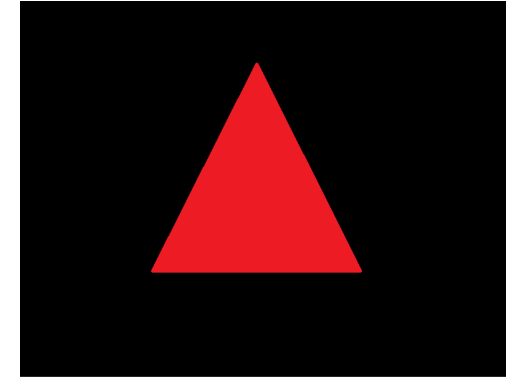
- References:
https://gitlab.freedesktop.org/mesa/piglit/-/blob/master/tests/spec/glsl-1.10/execution/discard/glsl-fs-discard-01.shader_test
https://gitlab.freedesktop.org/mesa/piglit/-/blob/master/tests/spec/glsl-1.10/execution/discard/glsl-fs-discard-02.c

- Piglit command: cd piglit; ./bin/shader_runner draw_triangle.shader_test