Assignments 2+3

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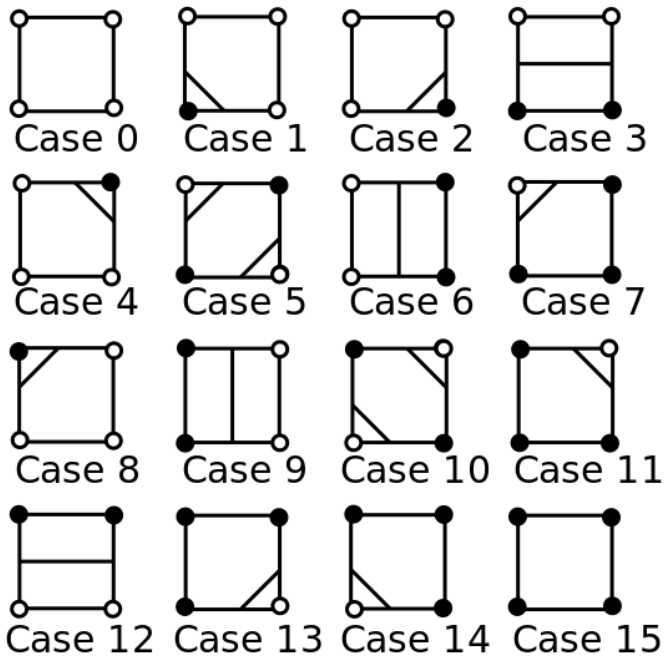
General remarks:

- Changed LoadData to keep the min and max value
- Changed DrawContour signature to keep aspect ratio
- Global contour stores 2d point tuples for marching squares contour lines
- Global vertices stores 3d points of triangles
- Global normals stores normal values of the vertices

Marching Squares



There are 7 cases that need lines drawn due to symmetry. Only case 5 (and 10) need 2 lines to be drawn. MarchingSquares selects the appropriate surrounding values and calls GetLinePoints which decides which is the current square case, and calculates the 2d points of the contour. The position of each point on the square's edge is determined by the weights of the corner values.

Marching Cubes

With a similar concept, but in 3d space, MarchingCubes for each cube, created by adjacent points in space, collects the vertex and normal values of its edges. Then it finds the appropriate cube case and according to the edgeTable3D calculates the triangle points for the vertex and the normal values. The values are normalized between [-1, 1].