Rendering transparent geometry in realtime brings a set of problems as the transparent objects need to be sorted first and rendered in order from back to front for their correct overlaying. A set of rendering algorithms called Order Independent Transparency (OIT) tries to accomplish this without sorting the geometry in advance. We create a program implementing five algorithms and compare their weaknesses, strengths, and properties. Some algorithms might excel in certain conditions and produce great results, yet fall short in slightly different environments. We aim to answer the question of which OIT algorithm is best suited for which scenarios.