Building on work by Daniel Jacobs, a PhD student of Kevin Buzzard's, I have written computer programs which compute classical and overconvergent automorphic forms, and have shown that there is a Jacquet-Langlands-style correspondence between certain overconvergent automorphic forms of weight 1 and classical modular forms of weight 1. This fits into a broader framework of considering overconvergent modular forms, begun by Hida and Coleman and continued by Buzzard and Chenevier amongst others.