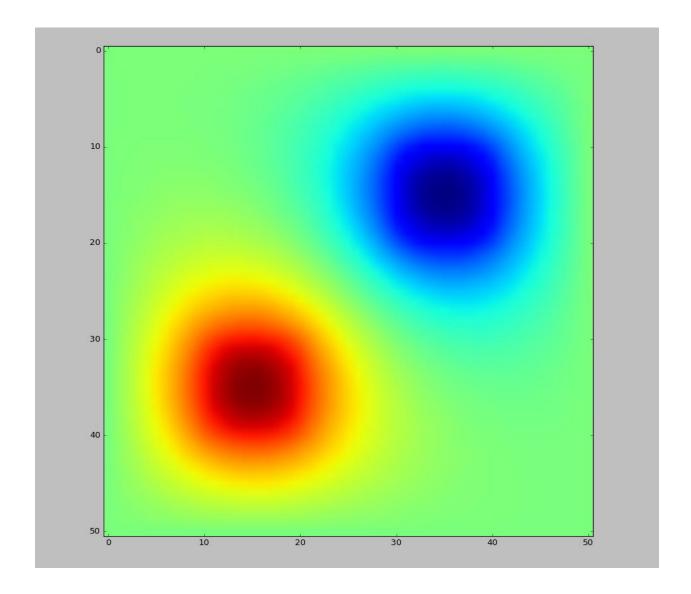
Problem 1:



Above is the electrostatic charges, blue indicates positive charge and red indicates negative. The charge field spreads out roughly evenly as depicted by the tiny bit of interference between the two charges.