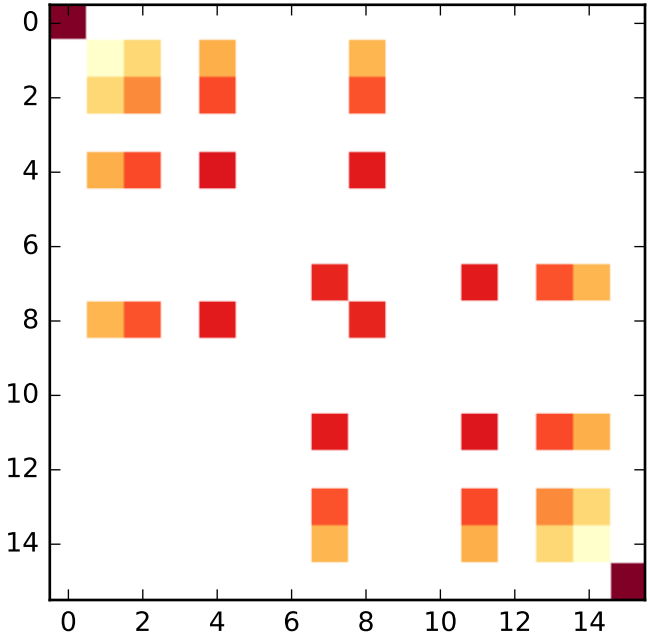Hamiltonian for $N = 4$