Problem #5'
Continue with the actual calculation of the double integrals required for calculating the expectation value of a two-body central Yukawa interaction in the Fermi-Gas ground state.

Problem #6
Calculate the specific heat (constant volume) of the homogeneous Bose gas and obtain the discontinuity of the slope. Consult Ref.1 of the notes for relevant details.

Problem #7
Obtain the density of states given by Eq.(293).

Problem #8
Check in detail Eq.(352).
We will discuss these calculations (5', 6, and 7) during the meeting on Monday, September 25, at 3pm.