UMBC — CMSC–443
Fall 1994 — Cryptography and Data Security

Quiz 10

Problem 1
For any DES key k, let the function T_k denote DES encryption under key k, and let $\overline{k}$ denote the bitwise complement of k. Also, let I denote the identity permutation.

- Prove: For any key k, if $T_k = I$ then $T_{\overline{k}} = I$.

(Hint: Use the complementation property.)

Problem 2
Ask a question about any course material covered to date that you do not completely understand. Try to state your question in focused and well-defined fashion. The instructor will try to answer your question in writing.