

CS 4390/5353
Quantum Computing
Home Assignment 2
Due September 2, 2004

In the class, we showed that the Deutsch-Josza algorithm works in the following two cases: when $f(x) \equiv 0$ and when $f(x) = x$. Show, step by step, that this algorithm also works in the two remaining cases: when $f(x) \equiv 1$ and when $f(x) = \neg x$.