Quiz-3
6th November 2020
Time: 11:40 am-11:55 am

Work it out on a piece of paper and upload!

In Deutsch-Jozsa algorithm, if the input is a uniform linear combination of two qubit basis states: $|00\rangle, |01\rangle, |10\rangle$ and $|11\rangle$ and the function has the property that $f(00) = 1, f(01) = f(10) = f(11) = 0$, then after execution of the algorithm, before any measurement is made, **find the state of the first register**. Also **work out the result of the measurement** in the first register.

3+2=5