CSC236 Tutorial Exercises, May 24, 2017

Here are your tutorial sections:

Surname	Time	Room	TA
A–Le	Wednesday 8-9pm	BA1180	Mian
Li–Sh	Wednesday 8-9pm	BA1230	Aamod
So–Z	Wednesday 8-9pm	BA1240	Zhaowei

These exercises are intended to give you practice with Complete Induction.

1. Full binary trees are binary trees where all internal nodes have 2 children. Prove that any full binary tree with more than 1 node has no more than twice as many leaves as internal nodes. Use complete induction on the total number of nodes.

2. Use Complete Induction to show that postage of exactly n cents can be made using only 6-cent and 7-cent stamps, for every natural number n greater than k (you will have to discover the value of k).