

**Exercise 0.1.** Read Chapter 11 of LYAHFGG.

**Exercise 0.2.** Instantiate the following two data-types as instances of the Functor type class.

*data T a = C a | D a a | E [a] deriving (Eq,Show)*

*data Rose a = Rose a [Rose a] deriving (Eq,Show)*

Remember that *fmap* is defined for lists. I have provided a few test cases. You can find more about Rose trees in the Bird text – look in the index to find the appropriate pages.

**Exercise 0.3 (Extra credit)** Prove that your instantiations of the Functor type class obey the Functor laws.