Homework 11
Due: Friday, April 20

This homework set is an algebraic complement to what we’ve been doing in class.

1. Please make sure you can do #2 from the previous homework set.

2. Algebraic background:
   (a) Read the basic definition of the length of a module [Liu, p. 258.]
   (b) Read the basic definition of the exterior product of vector spaces in your favorite algebra book.

3. [Liu, 7.1.6]

4. [Liu, 7.1.8] You may assume $A$ and $B$ noetherian, and $\text{Spec } B \to \text{Spec } A$ quasifinite.

5. [Liu, 7.2.2]