1. Fish data
   
   (a) The methods are different. This is supported by the result of multivariate one-way analysis of variance. The null hypothesis is rejected by both Wilks and Pillai tests.

   (b) The profile analysis rejects that the profile is level. It fails to reject either the profile is coincident or parallel.

   (c) I used `profileM` in `ama.R` to perform the test. The null hypothesis of profile being parallel is rejected.

2. One can fit growth models with degrees 1, 2, and 3. It turns out that the model with degree 1 fits the data well.

3. Read the original LASSO paper of Tibshirani (1996, JRSSB).
   
   The key contribution of the paper is to propose a penalty function for constrained linear regression that can achieve parsimony by giving up some unbiasedness.

4. Read the article by Yuan and Lin (2006, JRSSB) on group LASSO.
   
   The key contribution is allowing the data analysts to make use of domain knowledge to improve lasso methodology.

5. Read the SCAD paper by Fan and Li (2001, JASA). Briefly contrast SCAD with LASSO methods.
   
   The paper provides clear explanation of lasso methodology and uses a modified penalty to achieve the oracle property.