Using An SVM

When using SVM, need to specify:

- Choice of parameter C
- Choice of kernel (similarity function)
  - ↳ linear, Gaussian (RBF) - need to choose σ^2, polynomial

Multi-class classification

one-vs.-all (ova) 자동

Logistic regression vs. SVMs

n = no. of features

m = no. of training examples

- If $n \geq m$: Use Logistic regression (ex. 수능성적)
  or SVM w/o a kernel (linear kernel)
- If n is small, m is intermediate: Use SVM with RBF
  (n = 1-1000, m = 10-10,000)
- If n is small, m is large: Create/add more features, then use logistic regression or SVM w/o kernel
  (n = 1-1000, m = 50,000+)
- Neural network likely to work well for most, BUT may be slower to train.