1. Music recognition – ex: Naver music

- Genre: Classic  
Songs: 12 music

Input: short sound piece (5~n)

Classification (recognition):

1. Perceptron
2. (Linear or log) regression
3. Support Vector machine – Kernel concept (Linear Kernel)
4. Gaussian Mixture Model – time allow
5. Time-series classification
   1. Hidden Markov Model
   2. Conditional Random Field

Output: which songs

Homework:

Classification example: Using matlab

Input: 1-d points

2-d

3-d

Perceptron (Multi-layer Perceptron)

Linear / log regression

SVM Kernel( linear, quadratic, polynomial, Radial Basis Function)