10 Clustering 2

Consider the following statements pertaining to K-Means algorithm

a. Once an example has been assigned to a particular centroid, it will never be reassigned to another centroid.

Select an alternative

- ○ False
- ◉ True

A good way to initialize K-means is to select K (distinct) examples from the training set and set them as cluster centroids.

Select an alternative

- ◉ True
- ○ False

On every iteration of K-means, the cost funtion J(c(1),...,c(m),μ1,...,μk (the distortion function) either stays the same or decreases; in particular, it should never increase.

Select an alternative

- ○ True
- ◉ False

K-Means will always give the same results regardless of the initialization c centroids.

Select an alternative

- ○ True
- ◉ False

For some datasets, the ”right” or ”correct” value of K (the number of clusters) can be ambiguous, and hard even for a human expert looking carefully at the data to decide.

Select an alternative

- ○ False
- ◉ True

If we are worried about K-means getting stuck in bad local optima, one way to reduce this problem is if we try using multiple random initializations.

Select an alternative

- ◉ True
- ○ False

Nullstill

Maks poeng: 12