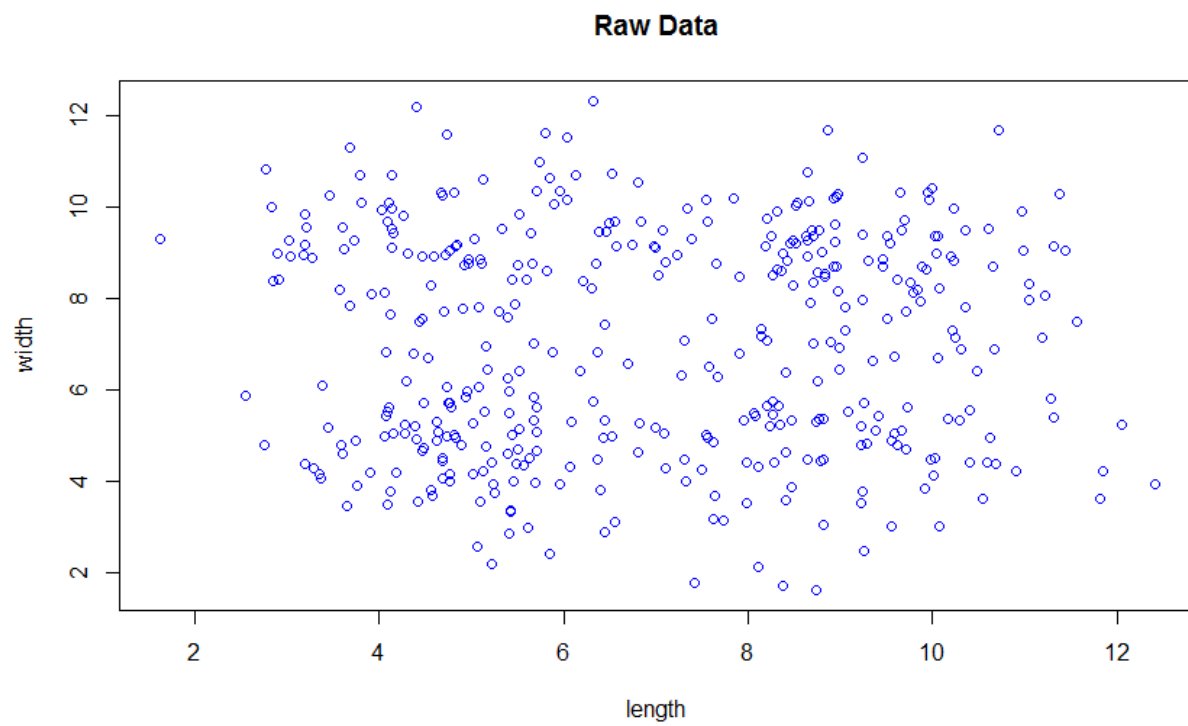**CSC522- Automated Learning and Design Analysis**
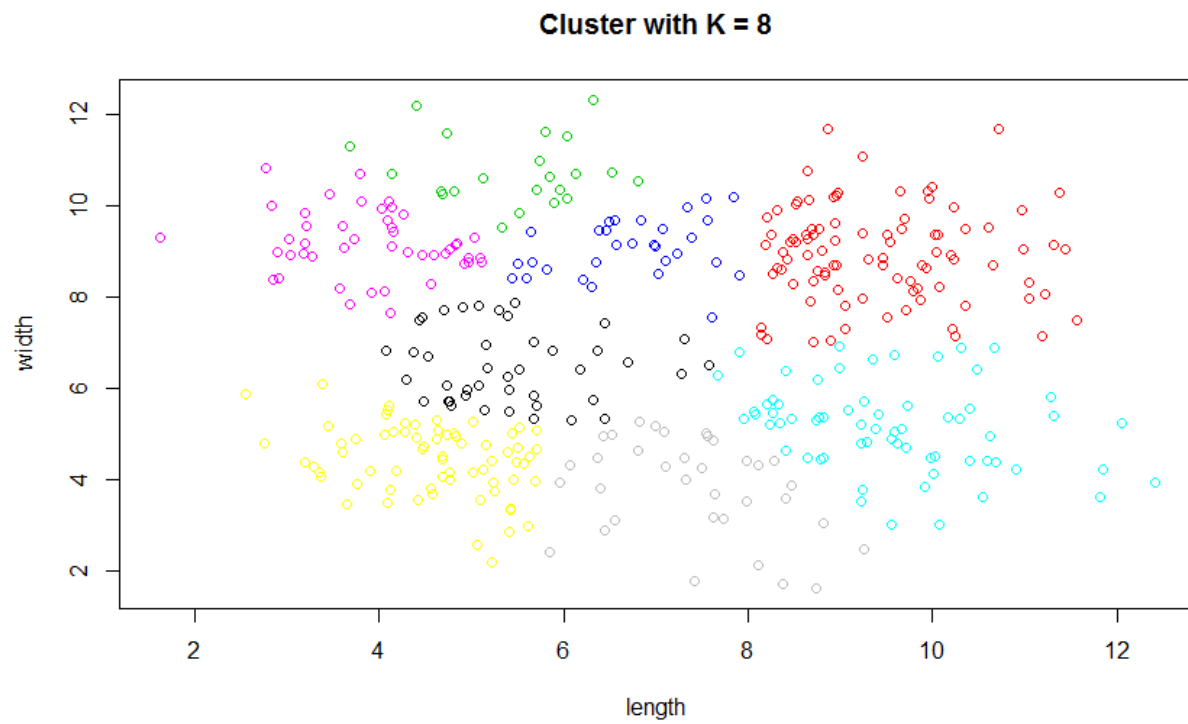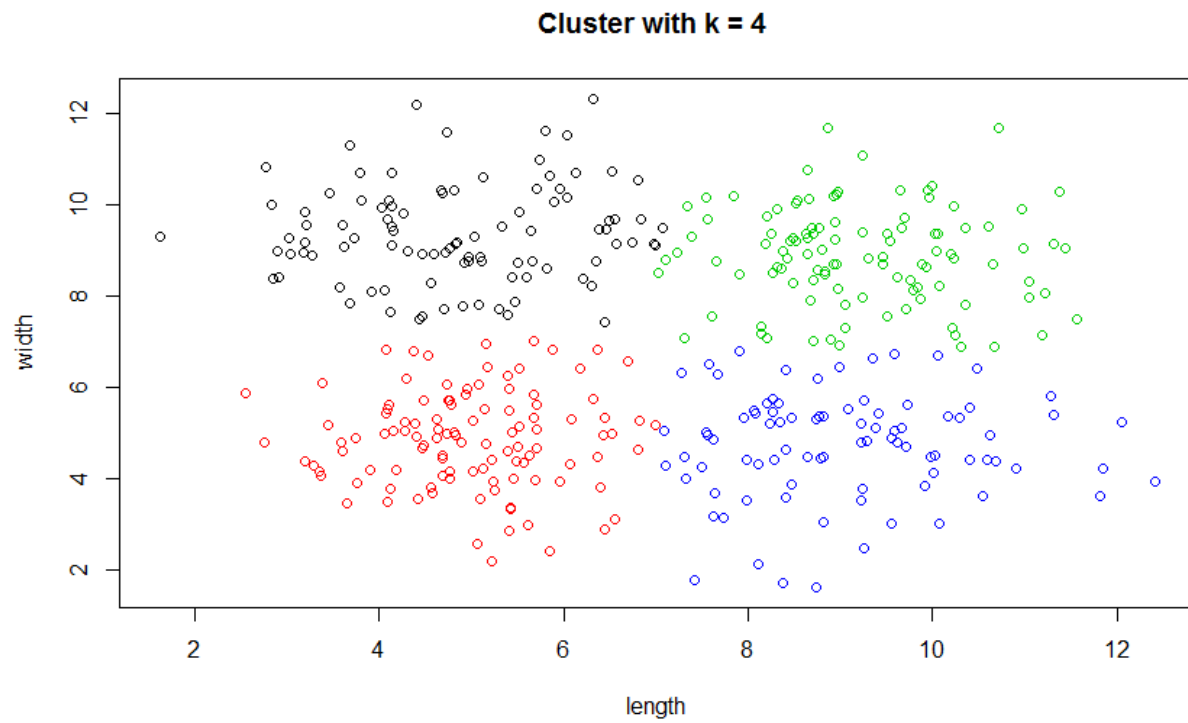
Homework- 2

Unity ID- sbhawsi

Solution 1:

Raw Data

Solution 2:

Cluster with k = 4

Cluster with K = 8
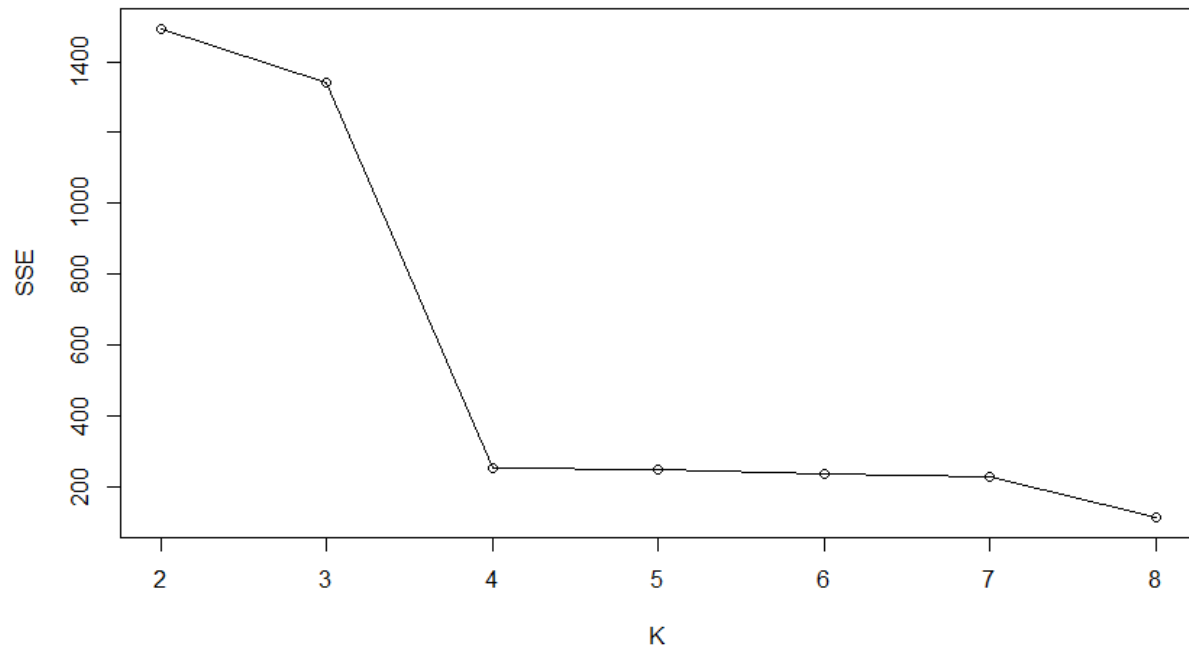

Here clustering with k=4 is better than k=8.

Solution 3:

a) My Bisecting K means find the maximum SSE and then splits that cluster with maximum SSE until the K is reached. Since the SSE decreases sharply on k=4, I am assuming it to be optimal.

b) Since the SSE is least from K=4 onwards. Therefore, optimal K=4

b) Plot for K=4

Bisecting K-means with K=4