CS412 Assignment #1
Bangqi Wang (bwang34)

QUESTION 1
  a. Max = 100, Min = 26.
  b. Q1 = 65, Q2 = 74, Q3 = 83
  c. Mean = 73.698
  d. Mode = 78
  e. Variance = 175.939
  f. Consistent with empirical formula = 0

QUESTION 2
  a. Before normalization, variance = 116.111
  b. After normalization, variance = 1.0
  c. Corresponding score for 90 after normalization = 0.241

QUESTION 3
  a. Pearson's coefficient = 0.710
  b. Covariance = 101.601

QUESTION 4
  a. Jaccard coefficient = 0.682
  b. H=1, Minkowski Distance = 6073
  c. H=2, Minkowski Distance = 708.615
  d. H= inf, Minkoeski Distance = 170
  e. Cosine Similarity = 0.844
  f. Kullback-Leibler Divergence = 0.204

QUESTION 5
  a. Chi-square Correlation = 23593.796