

**CSE3018 CONTENT BASED IMAGE AND VIDEO RETRIEVAL LAB
EXERCISE - 8**

DATE: 24.09.2019

DISTANCE OR SIMILARITY METRIC

1. For eg., consider
(i) You have an excel sheet / CSV file, with 100 records, each with 10 attributes, as shown below:

F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	Index / Rank
3	18	90.00	-4	118	0.0025	34546	12.34	16.78	640	
5	21	89.00	-8	113	0.125	23345	13.45	14.56	680	

(ii) There is a Query Record obtained as input. Eg.,

F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
4	20	70	-1	200	0.0025	45234	15.23	19.45	490

Show the top 20 results matching with this Query Record.

1. Implement the following Distance Measure / Similarity Measure (Write each of them as an individual Matlab file ; Call them from the Main Function)
 - a. Sum of Absolute Differences
 - b. Sum of Squared Absolute Differences
 - c. Euclidian Distance
 - d. City Block Distance
 - e. Canberra distance
 - f. Maximum Value Distance
 - g. Minkowski Distance
 - h. Chi-Square Distance
 - i. Hamming Distance
 - j. Cosine Distance
 - k. Earth Movers Distance
 - l. Pearson Correlation Coefficient
2. Index the records based on the metric values.

Note:

Name your file as Reg. No _ E3.doc eg., 16BCE1111_E3.doc