



kNN Classification

	Keyword 1	Keyword 2	Keyword 3	Keyword 4	Keyword 5	Keyword 6	Keyword 7	Keyword 8	Keyword 9	Keyword 10
Article 1	1	0	0	0	0	1	1	0	0	0
Article 2	1	1	1	1	1	0	0	0	0	0
Article 3	0	0	0	0	0	0	1	1	1	1
Article 4										
New User Article	0	1	1	1	0	0	0	0	0	1

Article 2 neighbour

Find to which class belongs New User Article by Distance: As Example of calculation
Article 1 – New User Article = $|1 - 0| + |0 - 1| + |0 - 1| + |0 - 1| + |0 - 0| + \dots = 7$
Article 2 – New User Article = 3
Article 3- New User Article = 6
Min is 3 – means highest match Article 2, then we can classify our new instance, based on the class it’s belong Article 2 and that class is in our training set.

0% Rank – no match at all
100% Rank – all matching to our instance in the training set means distance: 0

In example is distance 3 – 70% Rank

Overall, as per example above: Based on our kNN Classification 70% probability that New User Article belongs to Article 2 class