d1:	Decision theory investigates decision problems: how an agent deals with choosing among actions.
d2:	Reinforcement learning is a type of unsupervised learning where an agent learns how to behave in an environment.
d3:	Information retrieval deals with representing information objects.
q:	agent action

decision, theory, investigates, problems, how,
an, agent, deals, with, choosing,
among, actions, reinforcement, is, a,
type, of, unsupervised, where, learns,
to, behave, in, environment,
Information, retrieval, representation, objects

	11.03.01								11.03.02		11.03.03				11.03.04			11.03.05
	n1	tf(t, d1)	n2	tf(t,d2)	n3	tf(t,d3)	nq	tf(t,q)	N(t)	idf(t,D)	A1	A2	A3	B = tfidf(t,q,D)	cos θ1	cos θ2	cos θ3	
Words / text (t)	no.of occurance of word in d1	n1/total no of words in d1	no.of occurance of word in d2	n2/total no.of words in d2	no.of occurance of word in d3	n3/total no.of words in d3	no.of occurance of word in q	nq/total no.of words in q	no.of occurance of word in the document D (i.e. in d1 , d2, d3 and q)	LOG(4/N(t)) as n=4, (d1, d2, d3 and q)	tfidf(t,d1,D) = tf(t,d1)* idf(t, D)	tfidf(t,d2,D) = tf(t,d2)* idf(t, D)	tfidf(t,d3,D) = tf(t,d3)* idf(t, D)	tf(t,q)* idf(t, D)	cos θ1 = (A1 . B) / |A1|.|B|	cos θ2 = (A2 . B) / |A2|.|B|	cos θ3 = (A3 . B) / |A3|.|B|	
decision	2	0,15384615	0	0	0	0	0	0	1	0,602059991	0,092624614	0	0	0				
theory	1	0,07692308	0	0	0	0	0	0	1	0,602059991	0,046312307	0	0	0				The cosine similarity measures the similarity between two vectors based on the cosine of the angle between them. A higher cosine similarity score indicates a higher degree of similarity between the vectors.
investigates	1	0,07692308	0	0	0	0	0	0	1	0,602059991	0,046312307	0	0	0				
problems	1	0,07692308	0	0	0	0	0	0	1	0,602059991	0,046312307	0	0	0				
how	1	0,07692308	1	0,0555556	0	0	0	0	2	0,301029996	0,023156154	0,016723889	0	0				
an	1	0,07692308	2	0,1111111	0	0	0	0	2	0,301029996	0,023156154	0,033447777	0	0				
agent	1	0,07692308	1	0,0555556	0	0	1	0,5	3	0,124938737	0,009610672	0,006941041	0	0,062469368				
deals	1	0,07692308	0	0	1	0,14285714	0	0	2	0,301029996	0,023156154	0	0,043004285	0				The cosine similarity measures the similarity between two vectors based on the cosine of the angle between them. A higher cosine similarity score indicates a higher degree of similarity between the vectors.
with	1	0,07692308	0	0	1	0,14285714	0	0	2	0,301029996	0,023156154	0	0,043004285	0				
choosing	1	0,07692308	0	0	0	0	0	0	1	0,602059991	0,046312307	0	0	0				
among	1	0,07692308	0	0	0	0	0	0	1	0,602059991	0,046312307	0	0	0				
actions	1	0,07692308	0	0	0	0	1	0,5	2	0,301029996	0,023156154	0	0	0,150514998				In order of decresing cosine similarity (cos θ1 > cos θ2 > cos θ3)
reinforcement	0	0	1	0,0555556	0	0	0	0	1	0,602059991	0	0,033447777	0	0				
is	0	0	1	0,0555556	0	0	0	0	1	0,602059991	0	0,033447777	0	0	4,38714785	0,62060725	0	
a	0	0	1	0,0555556	0	0	0	0	1	0,602059991	0	0,033447777	0	0				
type	0	0	1	0,0555556	0	0	0	0	1	0,602059991	0	0,033447777	0	0				
of	0	0	1	0,0555556	0	0	0	0	1	0,602059991	0	0,033447777	0	0				
unsupervised	0	0	1	0,0555556	0	0	0	0	1	0,602059991	0	0,033447777	0	0				
where	0	0	1	0,0555556	0	0	0	0	1	0,602059991	0	0,033447777	0	0				
learn	0	0	3	0,1666667	0	0	0	0	1	0,602059991	0	0,100343332	0	0				
to	0	0	1	0,0555556	0	0	0	0	1	0,602059991	0	0,033447777	0	0				
behave	0	0	1	0,0555556	0	0	0	0	1	0,602059991	0	0,033447777	0	0				
in	0	0	1	0,0555556	0	0	0	0	1	0,602059991	0	0,033447777	0	0				
environment	0	0	1	0,0555556	0	0	0	0	1	0,602059991	0	0,033447777	0	0				
Information	0	0	0	0	2	0,28571429	0	0	1	0,602059991	0	0	0,17201714	0				
retrieval	0	0	0	0	1	0,14285714	0	0	1	0,602059991	0	0	0,08600857	0				
representation	0	0	0	0	1	0,14285714	0	0	1	0,602059991	0	0	0,08600857	0				
objects	0	0	0	0	1	0,14285714	0	0	1	0,602059991	0	0	0,08600857	0				
											0,011429452	0,008574599	0,033649167	0,081481879				
											|A1|	|A2|	|A3|	|B|				