CSE427s - 7 [P] RS3
Similarity Measures

0% (0/3)

✗ 1. Just by looking at the data in the example (you don't have to do any computation), which user do you expect to have the highest similarity with ME?

- (A) A
- (B) B
- (C) C
- (D) D

	HP1	HP2	HP3	TW	SW1	SW2	SW3	TH
A	4			5	1		1	
B	5	5	4			1	1	
C			1	2	4	5		5
D		3					3	3
ME	2		1		5		4	4

✗ 2. Just by looking at the data in the example (you don't have to do any computation), which user do you expect to have the **lowest** similarity with ME?

- (A) A
- (B) B
- (C) C
- (D) D

	HP1	HP2	HP3	TW	SW1	SW2	SW3	TH
A	4			5	1		1	
B	5	5	4			1	1	
C			1	2	4	5		5
D		3					3	3
ME	2		1		5		4	4

⊘ 3. Give the data representation used in the Jaccard similarity measure for user B and ME.

B={1,2,3,6,7}
ME={1,3,5,7,8}

	HP1	HP2	HP3	TW	SW1	SW2	SW3	TH
A	4			5	1		1	
B	5	5	4			1	1	
C			1	2	4	5		5
D		3					3	3
ME	2		1		5		4	4

⊘ 4. Compute the Jaccard similarity between **J(B, ME)**.

J(B,ME) = 3/(5+5-3)

	HP1	HP2	HP3	TW	SW1	SW2	SW3	TH
A	4			5	1		1	
B	5	5	4			1	1	
C			1	2	4	5		5
D		3					3	3
ME	2		1		5		4	4

⊘ 5. How about cosine? Give the **data representation** in order to compute Cos(A,ME).

	HP1	HP2	HP3	TW	SW1	SW2	SW3	TH
A	4			5	1		1	
B	5	5	4			1	1	
C			1	2	4	5		5
D		3					3	3
ME	2		1		5		4	4

6. Compute Cos(A,ME).

	HP1	HP2	HP3	TW	SW1	SW2	SW3	TH
A	4			5	1		1	
B	5	5	4			1	1	
C			1	2	4	5		5
D		3					3	3
ME	2		1		5		4	4

7. Compute P(B,ME) and P(C,ME).

	HP1	HP2	HP3	TW	SW1	SW2	SW3	TH
A	4			5	1		1	
B	5	5	4			1	1	
C			1	2	4	5		5
D		3					3	3
ME	2		1		5		4	4

8. Which similarity measure models our expectations best?

(A) Jaccard

(B) Cosine

(C) Pearson

(D) None really.