

For which document classifier the training cost is low and testing is expensive?

A. for none

B. for kNN

C. for NB

D. for fasttext

Given 3 users with ratings...

u1: 1 3

u2: 2 4

u3: 1 4

A. $\text{Sim}_{\text{corr}}(u1, u2) > \text{Sim}_{\text{corr}}(u1, u3)$

B. $\text{Sim}_{\text{corr}}(u1, u2) = \text{Sim}_{\text{corr}}(u1, u3)$

C. $\text{Sim}_{\text{corr}}(u1, u2) < \text{Sim}_{\text{corr}}(u1, u3)$

Item-based collaborative filtering addresses better the cold-start problem because ...

- A. usually there are fewer items than users
- B. it uses ratings from items with similar content
- C. item similarities can be pre-computed
- D. none of the above

For a user that has not done any ratings, which method can make a prediction?

- A. User-based collaborative RS
- B. Item-based collaborative RS
- C. Content-based RS
- D. None of the above**

For an item that has not received any ratings, which method can make a prediction?

- A. User-based collaborative RS
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- C. Content-based RS**
- D. None of the above

Which of the following graph analysis techniques do you believe would be most appropriate to identify communities on a social graph?

A. Cliques

B. Random Walks

C. Shortest Paths

D. Association rules

Modularity clustering will end up always with a single community at the top level?

- A. true
- B. Only for dense graphs
- C. Only for connected graphs
- D. never

Modularity clustering will end up always with the same community structure?

- A. true
- B. Only for connected graphs
- C. Only for cliques
- D. false

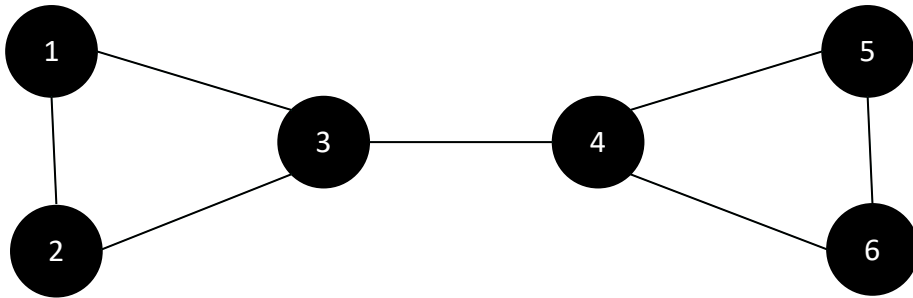
$\sigma_{xy}(v)$ of edge 3-4 is ...

A. 16

B. 12

C. 9

D. 4



When computing path counts for node 1 with BFS, the count at 6 is ...

- A. 1
- B. 2
- C. 3
- D. 4

