

CSE427s - 6 Lab6 (RS2)

78% (7/9)

- ✓ 1. Select all that applies to a **Top-N list** recommendation approach. From the point of view of the user that gets the recommendation, Top-N-list recommendations are
- ☐ (A) based on the user's preferences
 - ☒ (B) the same for every user
 - ☐ (C) similar to the item the user is currently interested in
 - ☐ (D) niche items
- ✓ 2. Select all that applies to a **Frequently Bought Together** recommendation approach. From the point of view of the user that gets the recommendation, FBT recommendations are
- ☐ (A) based on the user's preferences
 - ☒ (B) the same for every user
 - ☒ (C) similar to the item the user is currently interested in
 - ☐ (D) niche items
- ⊘ 3. Job 1: Provide the ****final output**** of job 1 for user2 for the provided example data.
- Use () for key-value pairs and [] for lists.
- (user2,[item2,item3])
- ✓ 4. Job 1: The Reducer of the first job...
- ☐ (A) ...is the IdentityReducer
 - ☐ (B) ...is not required (we can do a map-only job)
 - ☒ (C) ...passes through the key and list-of-values
- ✓ 5. Job 2 (*pairs*): What is the **Mapper output** for the following Mapper input (user2, [item3,item2]).
- ☐ (A) ([item3, item2], 1)
 - ☒ (B) ([item2, item3], 1)
 - ☐ (C) ([item3, item2], 1)
([item2, item3], 1)
 - ☐ (D) Both A and B are correct.
 - ☐ (E) None of the above.

✗ 6. Job 2 (pairs): From the list below, identify key-value paris that appear in the **entire job's output**.

- ☐ A ([item1 ,item2], 1)
- ☒ B ([item1 ,item2], 3)
- ☐ C ([item2 ,item4], 1)
- ☒ D ([item4 ,item2], 2)
- ☐ E ([item5 ,item6], 3)

✓ 7. Job 2 (*stripes*): Identify correct **Mapper output** key-value pairs for all items bought by user1 in the provided example data using the **stripes** approach.

- ☐ A (item1, {(item1, 1), (item2, 1), (item3 ,1)})
- ☒ B (item1, {(item2, 1), (item3 ,1)})
- ☐ C (item2, {(item1 ,1),(item3 ,1)})
- ☒ D (item2, {(item3 ,1)})
- ☐ E (item3, _)

✗ 8. Job 2 (*stripes*): How many integers need to be buffered in the reduce() function that receives the input for **item1** as key? We do not use a Combiner.

- ☐ A 3
- ☒ B 5
- ☐ C 7
- ☐ D 9
- ☐ E 11
- ☐ F none of the above

✓ 9. Which approach (**pairs** or **stripes**) is more efficient w.r.t. communication cost?

- ☐ A Pairs
- ☒ B Stripes
- ☐ C Same efficieny for both.

✓ 10. Which approach (**pairs** or **stripes**) scales better to Big data w.r.t. memory usage in the compute nodes? Consider the edge case that your job will actullay fail due to an out of memory error.

- ☒ A Pairs
- ☐ B Stripes
- ☐ C Same efficiency for both.