

QUIZ • 12 MIN

## Graded Advanced Features II Quiz

Try again

**TOTAL POINTS 6**

1. Imagine that we apply `X = PCA(n_components=5).fit_transform(data)` and `data` has shape `(5000, 53)`. What is the shape of `X`?

1 point

- ☐ (5, 53)  
☐ (5000, 5)  
☐ (5, 5000)  
☐ (53, 5)

2. To which data NMF is NOT applicable?
- ☐ Bag-of-words matrix
  - ☐ Standardized matrix
  - ☐ One-hot encoded feature

1 point

3. Suppose we have 2 categorical features:  $f_1$  with  $A$  possible values and  $f_2$  with  $B$  possible values. How many values will their interaction have?

1 point

- ☐ Exactly  $A + B$
- ☐ Exactly  $A * B$
- ☐ Less or equal to  $A * B$
- ☐  $\max(A, B)$

4. Imagine we have 2 categorical features represented as integers: `f1` with all values in range `[0, 1000]` and `f2` with values in range `[0, 100]`. What is the correct way to build their interaction?

1 point

- ☐ f1 + f2
- ☐ f1.astype(str) + f2.astype(str)
- ☐ f1.astype(str) + "\_" + f2.astype(str)
- ☐ (f1 + f2).astype(str)

5. What is a correct way to get t-SNE projection of train and test data?

1 point

- ☐ Apply t-SNE to the train and after that to the test.
- ☐ Apply t-SNE to the test first and after to train.
- ☐ Apply t-SNE to concatenation of train and test and split projection back.
- ☐ Doesn't matter, all variants will produce the same result.

6. Is it possible to do t-SNE projection into 20-dimensional space?

1 point

- ☐ Yes, why not.
- ☐ No, only 2-dim or 3-dim projections are possible.

☐ I, **Hong-Yuan Lin**, understand that submitting work that isn't my own may result in permanent failure of this course or deactivation of my Coursera account.

[Learn more about Coursera's Honor Code](#)

A. B.

Save

Submit