

## **Graded Assignment 3**

The due date for submitting this assignment has passed.

Due on 2024-02-11, 23:59 IST.

You may submit any number of times before the due date. The final submission will be considered for grading.

You have last submitted on: 2024-02-09, 22:23 IST

## It is mandatory to use sklearn.\_version\_ = 1.2.2 for solving all the questions

Instructions:

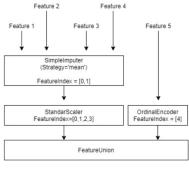
For all the questions below, use dataset from following link: https://drive.google.com/file/d/1lvvHj0v9LKwe6XUezgpIUY\_c0HdJUcCb/view?usp=sharing

1) How many features remain after applying following pipeline to the feature matrix? 1 point Feature 1 Feature 3 Feature 5 SimpleImputer (Strategy='mean') StandarScaler FeatureIndex=[0,1,2,3] OrdinalEncoder FeatureIndex = [4] FeatureUnion VarianceThreshold(threshold = 0.1) **5** O 2 O 3 Yes, the answer is correct. Score: 1 Accepted Answers:

2) What are the two most important features computed by RFE?

1 point

Preprocess the data using pipeline shown in the diagram. Use Logistic Regression (with default parameters) for the estimator. Encode target variable via ordinal properties of the data using pipeline shown in the diagram. Use Logistic Regression (with default parameters) for the estimator. Encode target variable via ordinal properties of the data using pipeline shown in the diagram. Use Logistic Regression (with default parameters) for the estimator. Encode target variable via ordinal properties of the data using pipeline shown in the diagram. Use Logistic Regression (with default parameters) for the estimator. Encode target variable via ordinal properties of the data using pipeline shown in the diagram. Use Logistic Regression (with default parameters) for the estimator. The data using thencoding.



- V1
- V2
- V3
- V4

Yes, the answer is correct.

Score: 1

Accepted Answers:

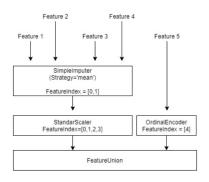
V1

V3

3) What are the indices of two most important features computed by SFS (forward)?

1 point

Preprocess the data using pipeline shown in the diagram. Use Logistic Regression (with default parameters) for the estimator. Encode target variable via ordinal encoding.



- 0 (i.e. feature V1)
- 1 (i.e. feature V2)
- 2 (i.e. feature V3)
- 3 (i.e. feature V4)

Yes, the answer is correct.

Score: 1

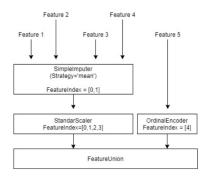
Accepted Answers:

- 1 (i.e. feature V2)
- 3 (i.e. feature V4)

4) What are the indices of two most important features computed by SFS (backward)?

1 point

Preprocess the data using pipeline shown in the diagram. Use LogisticRegression (with default parameters) for the estimator. Encode target variable via ordinal encoding.



- □ 0 (i.e. feature V1)
- □ 1 (i.e. feature V2)
- 2 (i.e. feature V3)
- 3 (i.e. feature V4)

Yes, the answer is correct.

Score: 1

Accepted Answers:

- 2 (i.e. feature V3)
- 3 (i.e. feature V4)