# Module 1 Quiz

测验, 10 个问题

1 point

1。
Select the option that correctly completes the sentence:

Training a model using labeled data and using this model to predict the labels for new data is known as _____.

- [x] Supervised Learning
- [ ] Density Estimation
- [ ] Clustering
- [ ] Unsupervised Learning

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1 point

2。
Select the option that correctly completes the sentence:

Modeling the features of an unlabeled dataset to find hidden structure is known as _____.

- [ ] Supervised Learning
- [ ] Regression
- [x] Unsupervised Learning
- [ ] Classification

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1 point

3。

Select the option that correctly completes the sentence:

Training a model using categorically labelled data to predict labels for new data is known as _____.

- Regression
- Clustering
- Classification
- Feature Extraction

---

1 point

4。

Select the option that correctly completes the sentence:

Training a model using labelled data where the labels are continuous quantities to predict labels for new data is known as _____.

- Feature Extraction
- Regression
- Classification
- Clustering

---

1 point

5。

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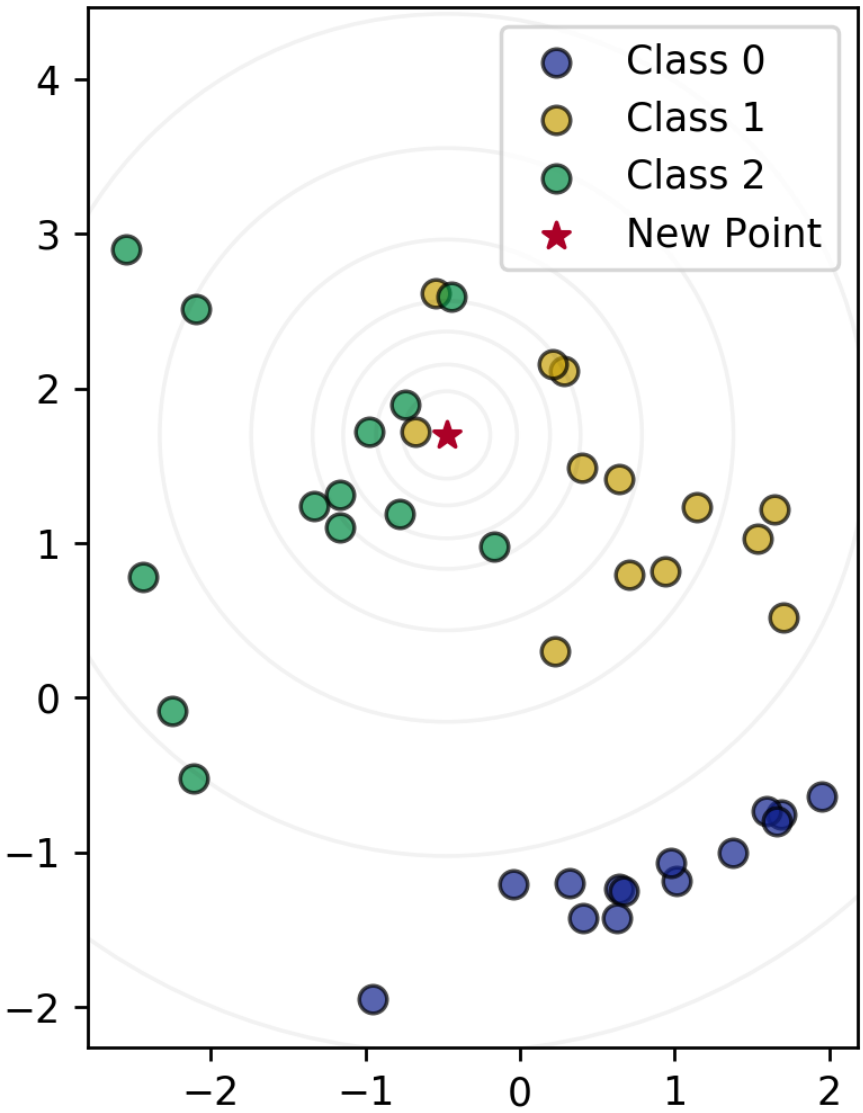
Using the data for classes 0, 1, and 2 plotted below, what class would a KNeighborsClassifier classify the new point as for k = 1 and k = 3?




- k=1: Class 2
- k=3: Class 1

- k=1: Class 1
- k=3: Class 0

- k=1: Class 0
- k=3: Class 1

- k=1: Class 1

- k=3: Class 2

- k=1: Class 0
- k=3: Class 2

---

1 point

6。
Which of the following is true for the nearest neighbor classifier (Select all that apply):

- [ ] A higher value of k leads to a more complex decision boundary
- [ ] Partitions observations into k clusters where each observation belongs to the cluster with the nearest mean
- [x] Memorizes the entire training set
- [ ] Given a data instance to classify, computes the probability of each possible class using a statistical model of the input features

---

1 point

7。
Why is it important to examine your dataset as a first step in applying machine learning? (Select all that apply):

- [x] See what type of cleaning or preprocessing still needs to be done
- [x] You might notice missing data
- [x] Gain insight on what machine learning model might be appropriate, if any
- [x] Get a sense for how difficult the problem might be

- [ ] It is not important

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1 point

8。

The key purpose of splitting the dataset into training and test sets is:

- (●) To estimate how well the learned model will generalize to new data
- ( ) To reduce the amount of labelled data needed for evaluating classifier accuracy
- ( ) To reduce the number of features we need to consider as input to the learning algorithm
- ( ) To speed up the training process

1 point

9。

The purpose of setting the random_state parameter in train_test_split is: (Select all that apply)

- [ ] To avoid predictable splitting of the data
- [x] To make experiments easily reproducible by always using the same partitioning of the data
- [ ] To avoid bias in data splitting
- [ ] To split the data into similar subsets so that bias is not introduced into the final results

1 point

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10.
Given a dataset with 10,000 observations and 50 features plus one label, what would be the dimensions of X_train, y_train, X_test, and y_test? Assume a train/test split of 75%/25%.

- X_train: (2500, )
- y_train: (2500, 50)
- X_test: (7500, )
- y_test: (7500, 50)

- X_train: (10000, 28)
- y_train: (10000, )
- X_test: (10000, 12)
- y_test: (10000, )

- X_train: (2500, 50)
- y_train: (2500, )
- X_test: (7500, 50)
- y_test: (7500, )

- X_train: (7500, 50)
- y_train: (7500, )
- X_test: (2500, 50)
- y_test: (2500, )

- X_train: (10000, 50)
- y_train: (10000, )
- X_test: (10000, 50)
- y_test: (10000, )

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我（**伟臣 沈**）了解提交不是我自己完成的作业 将永远不会通过此课程或导致我的 Coursera 帐号被关闭。
了解荣誉准则的更多信息

提交测试

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