Thank you. Your test submitted.

You have cleared this assessment.

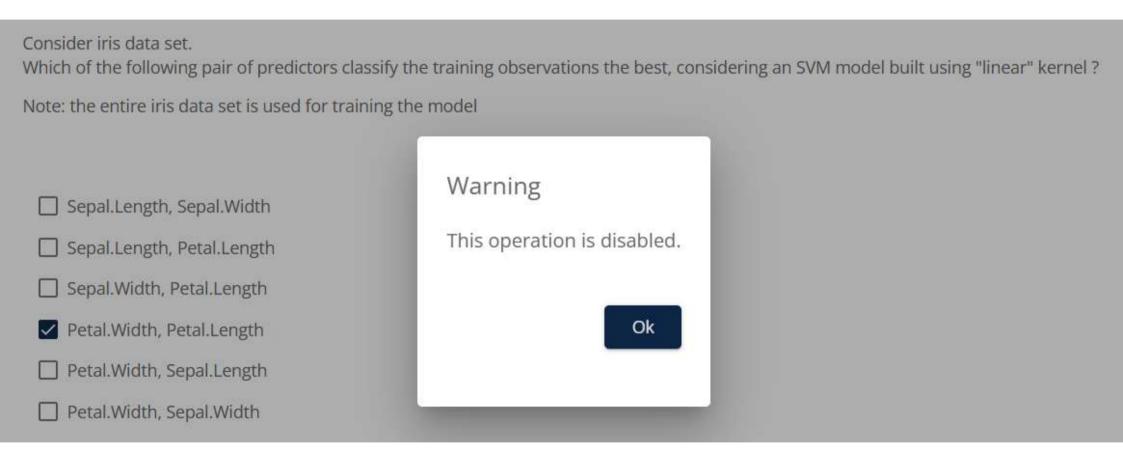| Obtained Percentage	Obtained Marks
60 %	6 / 10

Best Attempt Score:60 % on 12-03-2025

Which of the following has more chance of causing over-fitting ?

○ Soft Margin Classifier

◉ Hard Margin Classifier

Warning

Consider iris data set.

Which of the following pair of predictors classify the training observations the best, considering an SVM model built using "linear" kernel ?

Note: the entire iris data set is used for training the model

- [ ] Sepal.Length, Sepal.Width
- [ ] Sepal.Length, Petal.Length
- [ ] Sepal.Width, Petal.Length
- [x] Petal.Width, Petal.Length
- [ ] Petal.Width, Sepal.Length
- [ ] Petal.Width, Sepal.Width

Warning

This operation is disabled.

Ok

Consider the iris data set where we make use of three predictors - "Sepal.Length", "Sepal.Width" and "Petal.Length" to find out if the flower belongs to setosa species or not. We classify the same using SVM classifier.

What is the dimension of the hyper plane of this SVM model ? (Assuming that there is no kernel trick involved)

○ 1

◉ 2

○ 3

○ 4

Warning

This operation is disabled.

Ok

Consider iris data set.

How many observations of the training data are misclassified when a "linear" SVM model is built to classify the same based on the "Species", when considering "Sepal.Length" and "Sepal.Width" as predictors for classification ?

Note: the entire iris data set is used for training the model

○ 8

◉ 28

○ 5

○ 35

Warning

This operation is disabled.

Ok

A linear SVM model is which of the following in a 3 dimensional space ?

○ line

○ point

◉ 2D plane

○ 3D plane

Warning

This operation is dis

Which of the following classifies the training data more accurately?

◉ Hard Margin Classifier

◯ Soft Margin Classifier

Warning

Consider iris data set.

The data is classified based on "Species" of the flower using SVM classifier. The predictors for classification are "Petal.Length" and "Petal.Width". What is the best value of "gamma" for classifying the training data using Radial Kernel ?

Note: the entire iris data set is used for training the

Warning

This operation is disabled.

Ok

◉ 0.5

○ 2

○ 1

○ 1.5

Consider iris data set.

SVM classifier with polynomial kernel is used to classify the data based on the "Species" of the flower. All the parameters except "Species" in iris data set are used as predictors for the same.
What is the best estimated value for "degree" of a polynomial kernel for classifying the training data ?

Note: the entire iris data set is used for training the

Warning

This operation is disabled.

Ok

○ 1

◉ 2

○ 4

○ 5

Which of the below parameters affect the classification accuracy of an SVM model built using Radial kernel ?

- ☑ cost
- ☑ gamma
- ☐ degree
- ☐ beta

Warning

This operation is disabled.

Consider the below SVM model

```
from sklearn.svm import SVC
features = ["Petal.Length","Petal.Width"]
target = ["Species"]
model = SVC(kernel="linear", C = 1)
model.fit(iris_data[features],iris_data[target])
```

How many observation of the training data are cor   bove model ?

Warning

This operation is disabled.

Ok

○ 45

○ 46

● 47

○ 48