

## Lab 1 Introduction to Machine Learning

### Introduction to Machine Learning

This lab introduces some basic concepts of machine learning with Python. In this lab you will use the K-Nearest Neighbor (KNN) algorithm to classify the species of iris flowers, given measurements of flower characteristics.

By the completion of this lab, you will:

1. Follow and understand a complete end-to-end machine learning process including data exploration, data preparation, modeling, and model evaluation.
2. Develop a basic understanding of the principles of machine learning and associated terminology.
3. Understand the basic process for evaluating machine learning models.

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### Lab Steps

1. Make sure that you have completed the setup requirements as described in the Lab Overview section.
2. Now, run jupyter notebook and open the "IntroductionToMachineLearning.ipynb" notebook under Module 1 folder.
3. Examine the notebook and answer the questions along the way.

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### Question 1

1.0/1.0 point (graded)

From the plot, which species are more separated than the others?

☒ Setosa



☐ Versicolor

☐ Virginica

Submit

You have used 2 of 2 attempts

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## Question 2

1.0/1.0 point (graded)

What is the accuracy printed?

☐ 95.0

☒ 96.0



☐ 97.0

Submit

You have used 2 of 2 attempts

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## Question 3

0.0/1.0 point (graded)

How many cases are mis-classified?

☐ 2  
✓

☐ 3

☒ 4  
✗

☐ 5

### Explanation

There are 2 mis-classified cases, all 2 appear on the boundary between Versicolor and Virginica.

Submit

You have used 2 of 2 attempts

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**i** Answers are displayed within the problem

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