

<b>Started on</b>	Monday, 1 July 2024, 3:52 PM
<b>State</b>	Finished
<b>Completed on</b>	Monday, 1 July 2024, 3:57 PM
<b>Time taken</b>	4 mins 36 secs
<b>Grade</b>	<b>4.40</b> out of 10.00 ( <b>44%</b> )

Question **1**

Complete

Mark 1.00 out of 1.00

What type of Machine Learning is used for separating the flowers into the different categories based on the characteristics of the flowers as discussed in the project introduced in this section.

- ☒ a. Supervised
- ☐ b. Unsupervised
- ☐ c. Semi-supervised

Question **2**

Complete

Mark 1.00 out of 1.00

What is the Machine Learning Python library that supports building Machine Learning models, as discussed in the project introduced in this section?

- ☐ a. TensorFlow
- ☐ b. Keras
- ☒ c. scikit-learn
- ☐ d. PyTorch

### Question 3

Partially correct

Mark 2.40 out of 8.00

Assume that you want to help all grade 5 scholarship students in your school to prepare and pass the exam. So you want to find out when they're in grade 4 if they are going to pass the exam or not so that you can help them according to their respective need. Those who are going to pass do not need a lot of help, and the students who are in the maybe category would need some help and the students who are going to fail, need a lot of help!

In this assignment, you are required to build a classification model to separate (classify) a given set of students to find out if they are going to pass the grade-5 scholarship exam based on four other subjects (**Maths, Sinhala, English, History**) they take in grade 4.

You are required to build the Machine Learning model based on data that we have collected from the students who got their scholarship exam results. This data includes marks obtained by 120 students for the 4 subjects in grade-4 and also the respective categorization into **pass**, **maybe**, and **fail** based on the marks they got for the scholarship exam.

Once you have built the model you are required to submit the classification for 30 students whose classification (pass, maybe, fail) is not given to you. You are only given the marks for the four subjects and required to classify them based on the subject marks. This is what you will have to do if you want to use this system to help the students in grade 4 now! You know their grade-4 marks but want to use ML to see if they are going to pass. maybe or fail the scholarship exam when they sit for the exam next year.

A sample answer submission is given in the answer box. If you check it you will find that you will get 30% correct. If you manually change the answer you might be able to improve the answer quality (correct %). But rather than doing that, we want you to use an ML algorithm to get you the answer!

You can use the code given in the trinket or you can write your own code in your own python environment, or use a Jupyter notebook or Google collab to do this. Once you get the answer to the solution you need to cut and paste the list to the answer box and check to see how good your solution is.

Note that you have two steps to this question. A step to building a Machine Learning Model with the training data and the step to classify the given new set of students as the test dataset. Both data sets are given in the trinket also.

Python3

Code

Run

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[student\\_marks\\_train.csv](#)

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Choose File No file chosen

**Answer:** (penalty regime: 0 %)

Reset answer

1	fail
2	pass
3	pass
4	pass
5	fail
6	fail

	Got	Comment	Accuracy	
☑	fail pass pass pass fail fail fail fail pass pass maybe maybe maybe maybe maybe maybe maybe maybe maybe fail fail fail fail fail fail fail fail fail fail	input line count valid	0.3	☑

Partially correct

Marks for this submission: 2.40/8.00.

◀ 5.3 Your First ML Project - Part 2 (Build ML Model)

Jump to...

6.1 Why Version Controlling? ▶

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