Core ML (iris):

Description:

liris <u>data set</u> is a hello world for machine learning, through this model we can predict the type of iris plant i.e(Iris Setosa,Iris Versicolour, Iris Virginica) by giving the following inputs

- 1. sepal length in cm
- 2. sepal width in cm
- 3. petal length in cm
- 4. petal width in cm

STEPS:

The model has already been trained on KERAS with the prediction accuracy of 97.33%. Please watch this tutorial by Siraj Raval.

You just have to do the following steps to use this model on any apple device.

- 1. Load the IRIS.mlmodel file in xcode.
- 2. Write the code for prediction through model in swift.
- 3. Write a code to Prompt the user to enter the 4 parameters, specified in description.
- 4. Append the inputs in an array and *convert* it into shape of (1,4) i.e 1 row and 4 columns.
- 5. Our model will give us the three values which are probabilities, as there are three types of Iris plants. The correct out of those three is the one which is the largest.

For example: Here X is the input which the user has given and predict contains the prediction from our model. The largest value is on the second index (0.5539), further we will look for the value at second index of order array which in this case is, 'Iris-versicolor'. Write the code to perform above step.

```
order=['Iris-setosa', 'Iris-versicolor', 'Iris-virginica']
X=[4.9,3,1.4,0.2]
Predict=[0.3234109 0.5539529 0.12263616]
```

You can test your app by giving the inputs similar to this.