

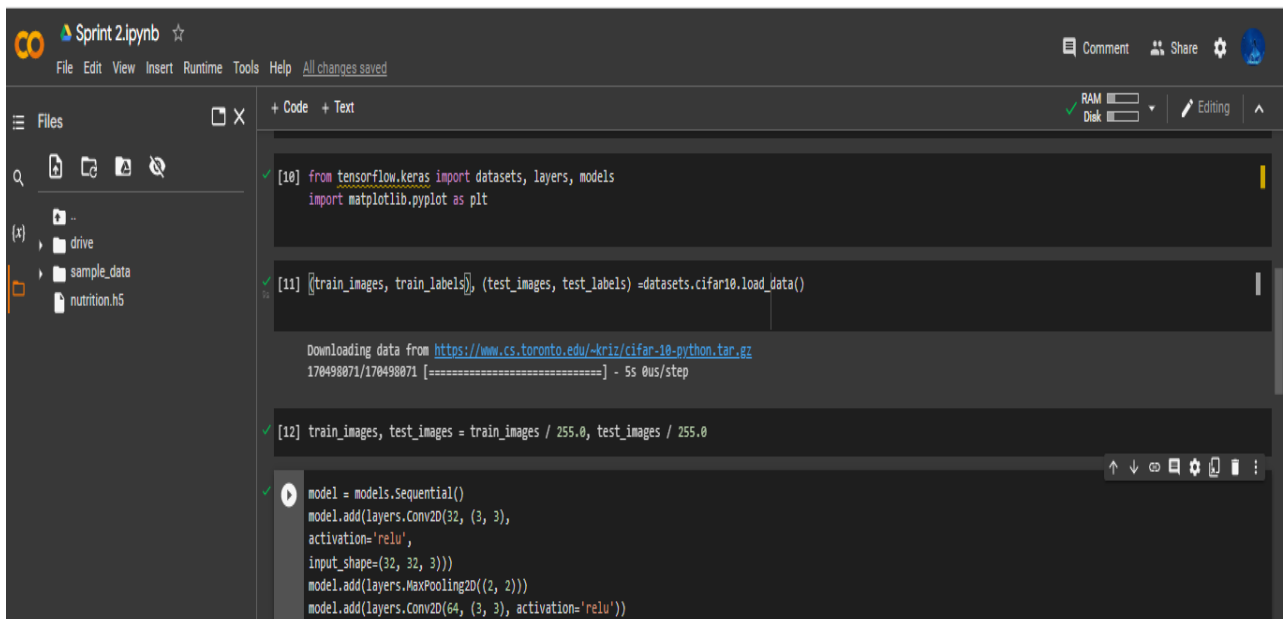
Initializing The Model

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Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts

Keras has 2 ways to define a neural network:

- Sequential
- Function API

The Sequential class is used to define linear initializations of network layers which then, collectively, constitute a model. In our example below, we will use the Sequential constructor to create a model, which will then have layers added to it using the add() method.



```
from tensorflow.keras import datasets, layers, models
import matplotlib.pyplot as plt

(train_images, train_labels), (test_images, test_labels) = datasets.cifar10.load_data()

Downloading data from https://www.cs.toronto.edu/~kriz/cifar-10-python.tar.gz
170498871/170498871 [=====] - 5s 0us/step

train_images, test_images = train_images / 255.0, test_images / 255.0

model = models.Sequential()
model.add(layers.Conv2D(32, (3, 3),
activation='relu',
input_shape=(32, 32, 3)))
model.add(layers.MaxPooling2D((2, 2)))
model.add(layers.Conv2D(64, (3, 3), activation='relu'))
```