**Documentation**

1. CNN program

In this program, the data augmentation is done through the datagen function defined on code block 11, as shown in the figure below. The convolution layers have been added to in their 2D functions as shown in block 12 below. This allows for the 70% accuracy shown in the plot and figure below.

Text

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Graphical user interface, chart

Description automatically generated

2. Balloon Flight Game

The program has the added features of speed increases depending on the level you are on, a leveling system, more spacing in the obstacles present as well as more high scores through the text file. We can see the code for the leveling and speed increasing system in lines 136 to 146 of the update function as shown below. We can also view the obstacle spacing on lines 133 to 134 and finally the high scores are up to 8 as shown in the text file in the figure below.

Text

Description automatically generated

A picture containing text

Description automatically generated

Graphical user interface, text, application

Description automatically generated