Task 1 - Report

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For the training dataset we used the first 30 tfrecords (the records from `images_gray_0.tfrecords` to `images_gray_29.tfrecords`), which corresponds to 75% of the total tfrecords. For the validation dataset we used the next 5 tfrecords (the records from `images_gray_30.tfrecords` to `images_gray_34.tfrecords`), which corresponds to 12,5% of the total tfrecords. For the test dataset we used the last 5 tfrecords (the records from `images_gray_35.tfrecords` to `images_gray _39.tfrecords`), which also corresponds to 12,5% of the total tfrecords.

The loss function used was `tf.keras.losses.CategoricalCrossentropy(from_logits=True)` and the accuracy used was `tf.keras.metrics.Accuracy`.

We used 15 epochs to train our model, obtaining a loss of $\simeq 0.14$ and an accuracy of $\simeq 95\%$. For the validation set, we managed a loss of $\simeq 0.21$ and an accuracy of $\simeq 94\%$. Finally, for the test set our model managed a loss of $\simeq 0.20$ and an accuracy of $\simeq 94\%$.