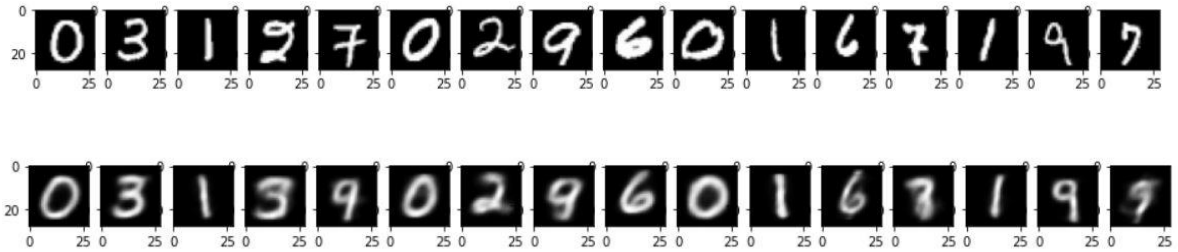
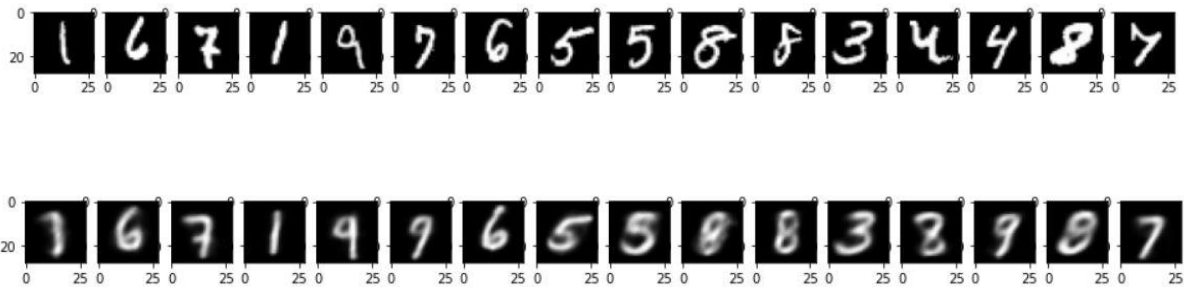


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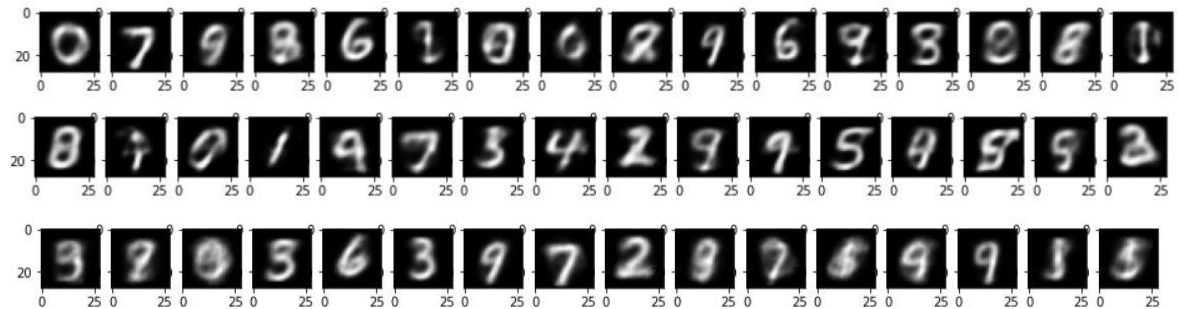
Here are a few samples, the first row has the original MNIST images, the second row contains the reconstruction of those images



Another example:



Here are new examples generated using the decoder of the network, 16 generated images in each row:



The architecture used:

Encoder – 200 neurons projected down to 32 neurons, 16 for the mean and 16 for the variance.

Activation tanh and, Dropout of 0.2 and Optimizer was Adam.

Decoder: Reverse of the encoder, sigmoid activation for the last layer to ensure the outputs between (0,1).

Loss was a combination of the KL divergence loss and the Log loss (Binary cross Entropy).

KL divergence loss was weighted by 0.009 for the outputs obtained above.