This program is compiled based on Python 3 in TensorFlow. The main code of the program is stored in `\NST_VGGNet.ipynb`. Part of the sample raw data is stored in `\sample_data\subset`.

In the process, we build practical experience and develop intuition around the following concepts:

1) Eager Execution – we use TensorFlow's imperative programming environment that evaluates operations immediately. We build a subset of our model that will give us access to the necessary intermediate activations using the Functional API.

2) Leveraging feature maps of a pretrained model.

3) Create custom training loops - we examine how to set up an optimizer to minimize a given loss with respect to input parameters.

We follow the general steps to perform the program:

1) Visualize data.

2) Basic Preprocessing/preparing our data.

3) Set up loss functions.

4) Create model.

5) Optimize for loss function.