An Introduction to CNN

Exercise 1: Convolution

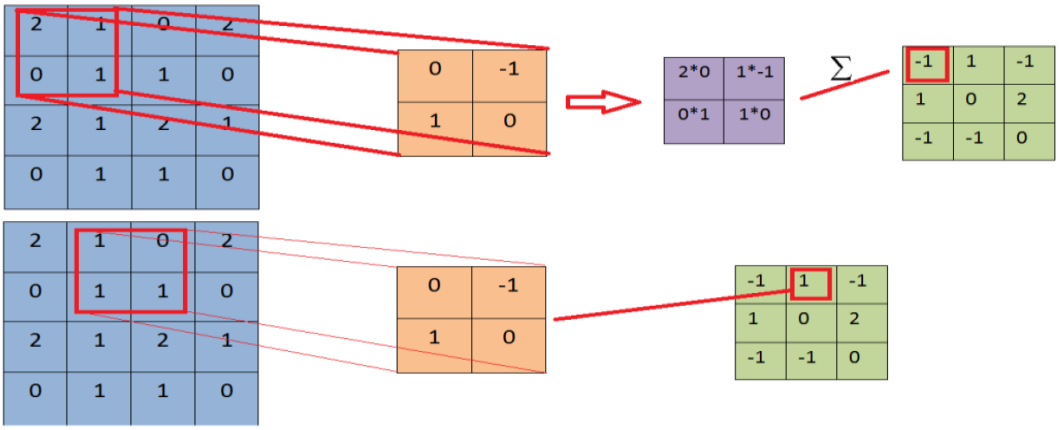

Figure 1: Demo of Convolution

In the given file directory …*convolution_operation_exercise*, you are required to read and understand the *code.m* file, calculate the convolution results of *cat_input.jpg* using *kernel* image and visualize the results in MATLAB.

Using the six different kernels, calculate six different convolution result and check the outputs after visualization.

Exercise 2: Pooling

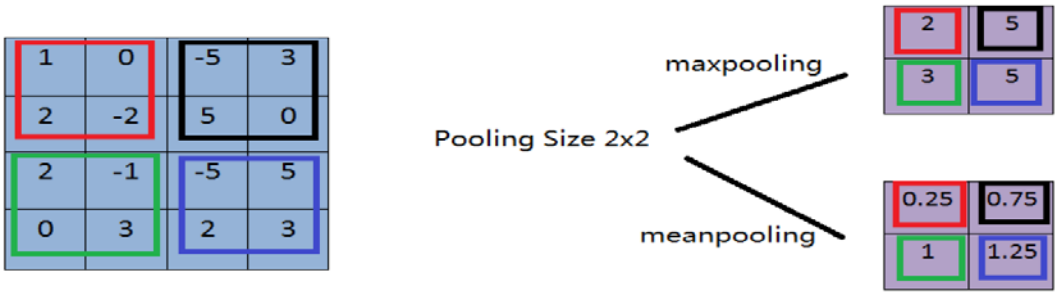

Figure 2: Demo of Pooling

In the given file directory …*pooling_operation_exercise*, you are required to read and understand the *code.m* file, calculate the pooling results of *cat_input.jpg* using *pooling* method and visualize the results in MATLAB.

Using the two pooling methods, calculate the pooling results and check the outputs after visualization.