**Numpy array creation operations**

**np.empty**

It creates a Numpy array of specified shape and size without initializing it.

**np.eye**

It creates a 2-dimensional Numpy array with diagonal entries as ones and the rest as zeros. It takes in a parameter k, which is zero by default. This means that the main diagonal entries are made as one. A positive value indicates making the upper diagonal entries as one, and a negative value indicates making the lower diagonal entries as one.

**np.identity**

It makes an identity array. An identity array is a square array, meaning the number of rows and columns are equal with ones on the main diagonal.

**np.linspace**

It returns an evenly spaced array over a specified interval. It has a start and a stop values that indicates the first and the last value in the sequence. We can exclude/include the stop of the interval specified by setting a parameter. We will discuss more on this in the coding example.

**np.ones**

It makes an array of a specified shape and size initialized with only ones.

**np.zeros**

It makes an array of specified shape and size initialized with only zeros.