

## Exercise 1.

Since there is no vector in opencv, when we want to use vector in opencv, we can only use a matrix with a column instead of using a vector. The prototype of creating a 2-D matrix is as follows:

```
cvMat* cvCreateMat ( int rows, int cols, int type );
```

Here type can be any of a long list of predefined types of the form:

CV <bit depth>(S|U|F) C<number of channels>.

So the matrix could be up to 32 bit floats. And when we represent a colorful image, we can use different color channels in an RGB channel system to represent the image. The operators in it will operate separately.