Consider the 5x5 matrix below as an example of a toy image. Consider the two convolutional filters applied to the image below.

2	3	7	2	1
6	4	10	4	2
4	5	8	9	2
5	6	7	2	1
6	9	5	0	4

-1	-1	1
-1	1	-1
1	-1	-1

→

-17	-18	?
?	?	?
?	?	?

1	5	2
4	2	3
0	1	0

→

69	78	?
?	?	?
?	?	?

-1	10	-1
-1	10	-1
-1	10	-1

→

?	?	?
?	?	?
?	?	?

We see that the output of m convolutional filters gives us m new matrices. We can call them channels in the context of a convolutional neural network.