# ReLU ACTIVATION FUNCTION

## ReLU

$$f(x)= \begin{cases} 0 & \text{for } x < 0 \\ x & \text{for } x => 0 \end{cases}$$

rectifier
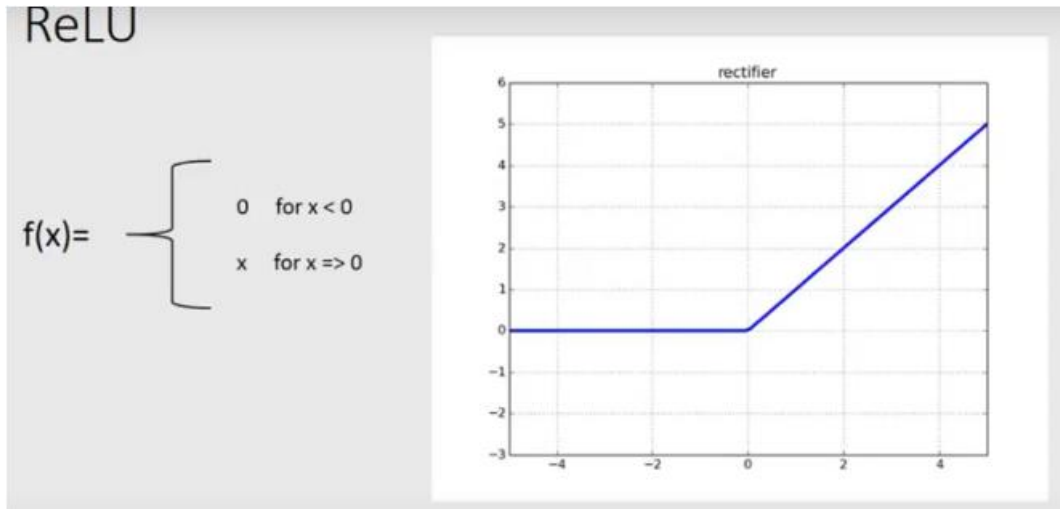
## ReLU Layer

**Filter 1 Feature Map**

| 9 | 3 | 5 | -8 |
|---|---|---|----|
| -6 | 2 | -3 | 1 |
| 1 | 3 | 4 | 1 |
| 3 | -4 | 5 | 1 |

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| 9 | 3 | 5 | 0 |
|---|---|---|---|
| 0 | 2 | 0 | 1 |
| 1 | 3 | 4 | 1 |
| 3 | 0 | 5 | 1 |