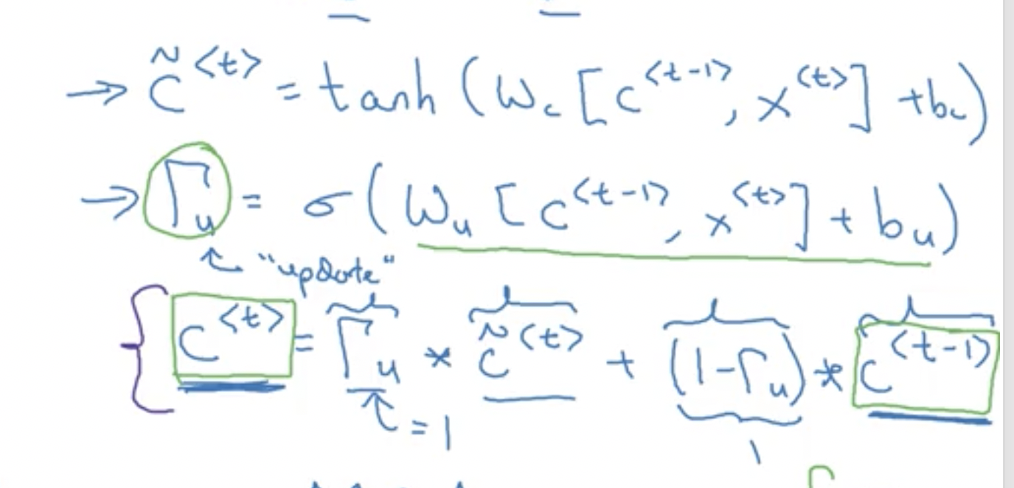
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| |  |  |  |  | | --- | --- | --- | --- | | wxh | | | | | 0.287027 | 0.84606 | 0.572392 | 0.486813 | | 0.902874 | 0.871522 | 0.691079 | 0.18998 | | 0.537524 | 0.09224 | 0.558159 | 0.491528 |  |  |  |  |  | | --- | --- | --- | --- | | whh | | | bias | | 0.427043 | 0.17 | 0.23 | 0.567001 | | 0.33 | 0.12 | 0.4 |  | | 0.8 | 0.66 | 0.9 |  | |  |
|  |  |

Output:

input: H

1. Next character
2. Next memory cell

c0 = (0; 0; 0)

x1 = (1; 0; 0; 0)

c\_tilda1 = tanh(w\_c\_xh\*x1 + w\_c\_hh\*c0 + bias\_c)

= (0,6931679369; 0,8995536059; 0,8021185304)

r\_u = sigmoid(w\_r\_xh\*x1 + w\_r\_hh\*c0 + bias\_u)

= (0,6130141761; 0,5938731029; 0,5547792351)

c1 = Hadamard product(r\_u, c\_tilda1) + Hadamard product(1-r\_u, c0)

= (0,4249217718; 0,5342206912; 0,4449987048)

y\_hat1 = softmax(c1)

= (0,6046603847; 0,630466982; 0,6094494753)