Homework6

Yu Cuicui

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# Part1

## 1、Forward propagation process of LSTM

#### （1）Forgetting gate processing formula



#### （2）Input gate processing formula





#### （3）Using forgetting gate and input gate to renew memory cells. The formula is as follows



#### （4）Using output gate to output information to hidden layer. The formula is as follows





## 2、Forward propagation process of GRU

#### Update gate processing formula



#### Reset gate processing formula



#### (3) Reset memory information with reset door



#### (4) Using update gate to calculate the output of current hidden state

