

# Homework 2

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**Due date: Oct. 8, 2018**

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## 1. Retiming for Register Minimization

Prove the following equation and explain your prove in detail.

$$\sum_{i=1}^k (w_r(e_i)\beta(e_i) + w_r(\hat{e}_i)\beta(\hat{e}_i)) = w_{r,\max} \quad \text{where} \quad w_{r,\max} = \max_{1 \leq i \leq k} w_r(e_i)$$

The notations are described in lecture note 4 and textbook.

## 2. Submission

- ✓ **Due date: Oct. 8 (Mon.) 13:00**
- ✓ Submit your answer in class.