

# Homework 1

## Problem 1

What is digital circuit? What is analog circuit? Describe the pros and cons of them.

## Problem 2

Use logic operation(i.e.  $\&$ ,  $|$ ,  $!$ ) in HCL to represent the following statements:

1.  $a = b < c$
2.  $a = b + c$
3.  $a = b == c$
4.  $a = \text{XOR}(b,c)$
5.  $a = \text{MAX}(b,c,d)$

You are welcomed to send your solution to TAs via email ([oucz14@fudan.edu.cn](mailto:oucz14@fudan.edu.cn)) before 23:59, Thu, Mar.16 .