

# Homework

## **Release Date**

26/11/2025

## **Due Date**

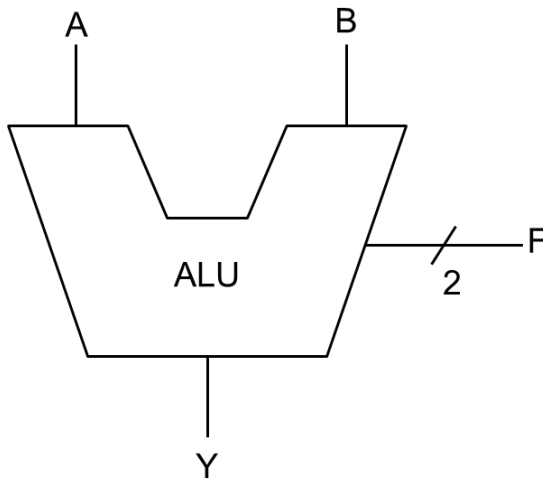
02/12/2025

## **Overview**

This homework is to help you revise digital logic design which is essential for this course.

## 1 Combinational Logic Design

Design the logic circuit of a 2-input ALU to perform the functions in the table below. Make use of the logic gates together with multiplexers and decoders.



F[1:0]	Function
00	A AND B
01	A OR B
10	A XOR B
11	A = $\sim$ B