# 논리회로설계및실험(003) <실습 보고서>

제출일: 2024-09-25; 4주차 실습

이름: 권민규(202355517), 윤태영(202355565) 12조

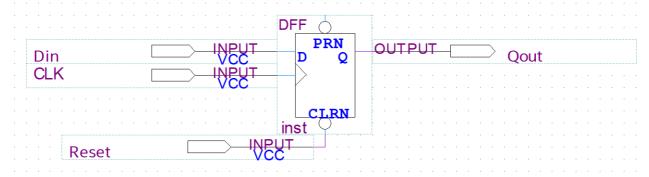
# 실습 1

# 설계 개요

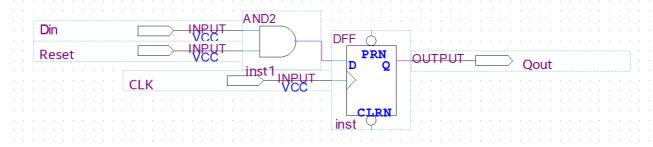
- Synchronous D Flip-Flop with Asynchronous Reset
- Synchronous D Flip-Flop with Synchronous Reset

#### Hardware Architecture

• Synchronous D Flip-Flop with Asynchronous Reset

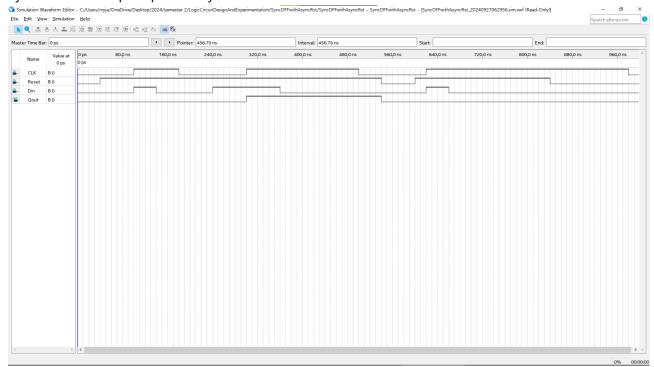


• Synchronous D Flip-Flop with Synchronous Reset

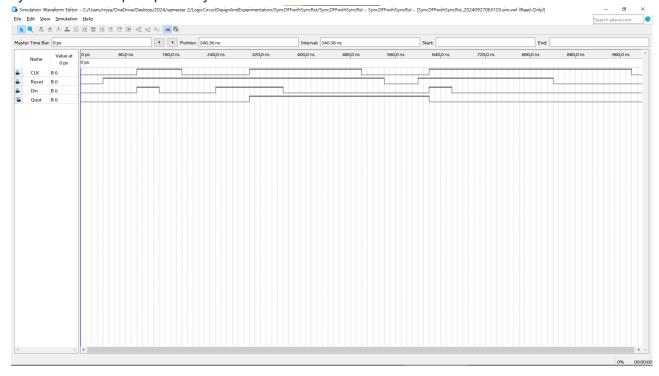


RTL Simulation 결과 분석

• Synchronous D Flip-Flop with Asynchronous Reset



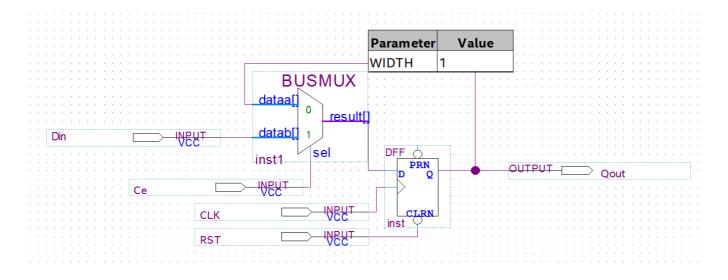
• Synchronous D Flip-Flop with Synchronous Reset



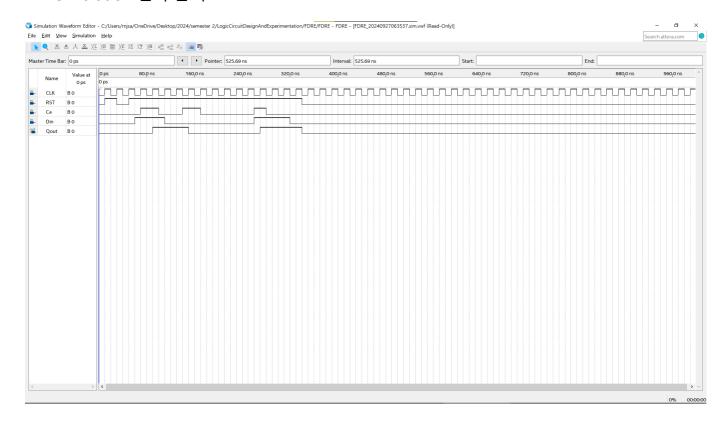
# 실습 2

# 설계 개요

• D Flip-Flop with Asynchronous Reset and Clock Enable(Synchronous)



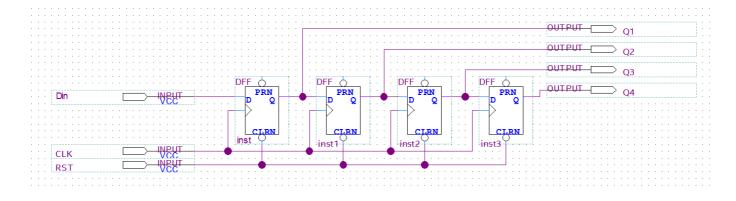
### RTL Simulation 결과 분석



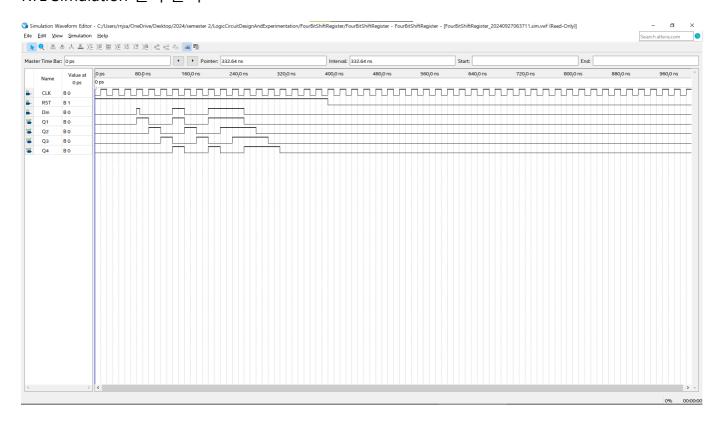
# 실습 3

# 설계 개요

• 4-bit D Flip-Flop Shift Register



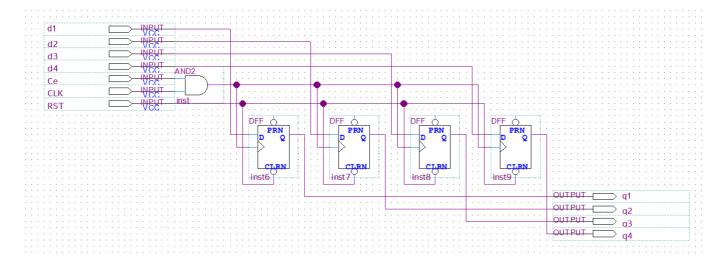
# RTL Simulation 결과 분석



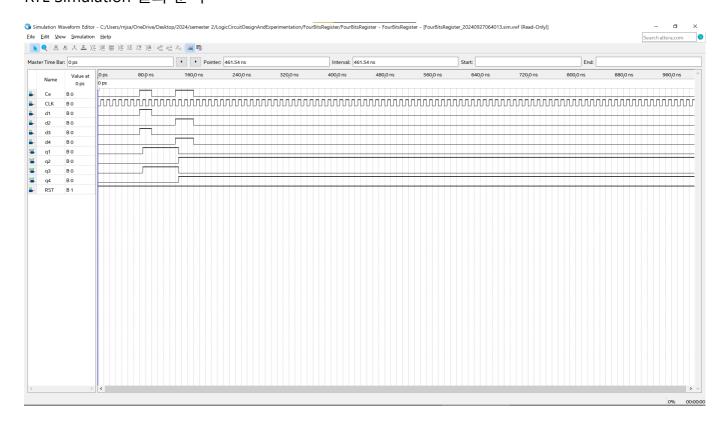
# 실습 4

# 설계 개요

- 4-bit Register
- with Clock Enable
- 입력: Ce, [3:0] Din, CLK, RST
- 출력: [3:0] Dout



### RTL Simulation 결과 분석

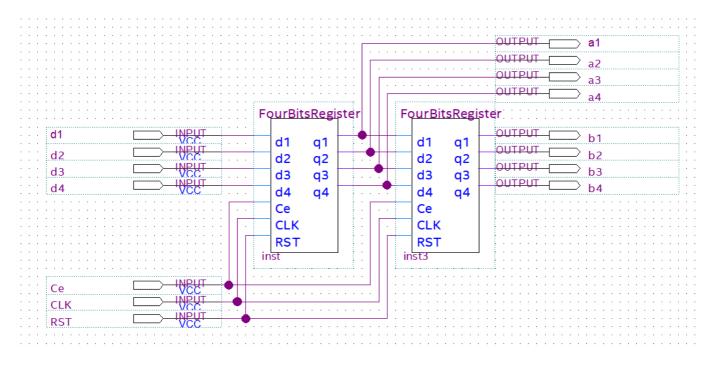


# 실습 5

# 설계 개요

- 4-bit Register
- with Clock Enable
- with Shift Register
- 입력: Ce, [3:0] Din, CLK, RST
- 출력: [3:0] A, [3:0] B

2024-09-26



# RTL Simulation 결과 분석

