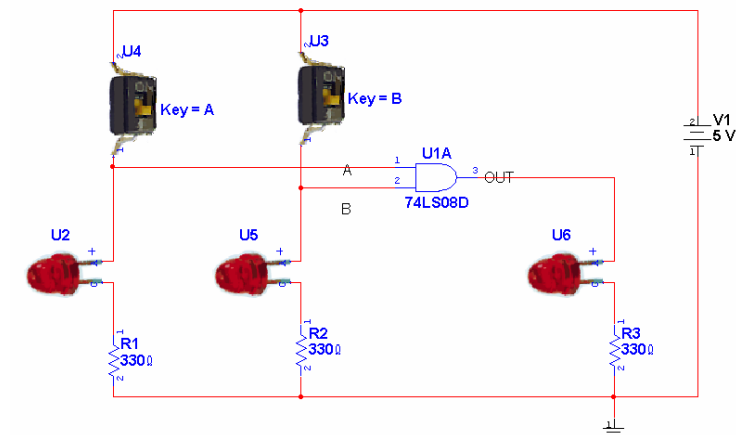


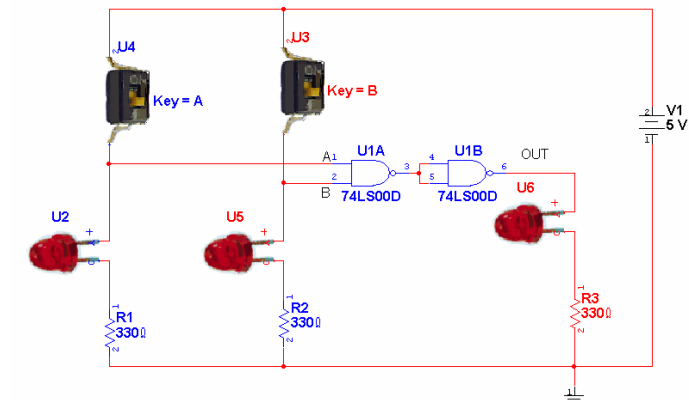
기본 논리 게이트 확인 실험

1. AND (75LS08)



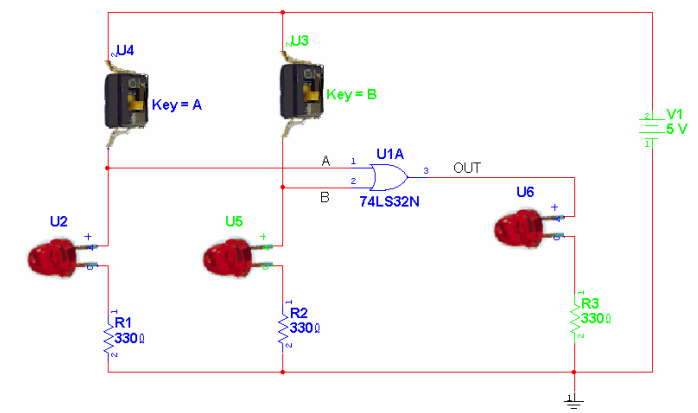
A	B	OUT
Off	Off	
Off	On	
On	Off	
On	On	

(75LS00)



A	B	OUT
Off	Off	
Off	On	
On	Off	
On	On	

2. OR (75LS32)



A	B	OUT
Off	Off	
Off	On	
On	Off	
On	On	

문제) NAND gate 만을 이용하여 위의 OR 회로를 구현해 보시오.

3. NOT 과 NAND 에 대해서도 2 와 같이 해보시오.

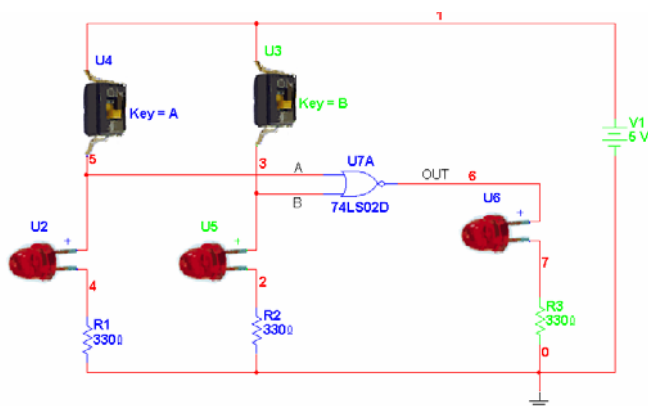
Not

A	OUT
Off	
Off	
On	
On	

NAND

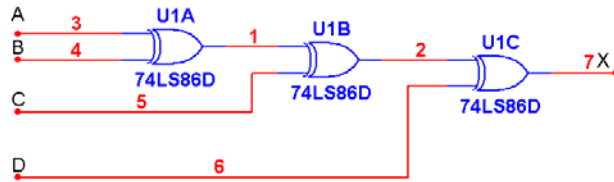
A	B	OUT
Off	Off	
Off	On	
On	Off	
On	On	

4. NOR (75LS02)



A	B	OUT
Off	Off	
Off	On	
On	Off	
On	On	

5. 아래 진리표를 채워보고, 부울 방정식으로 표현해 보자.

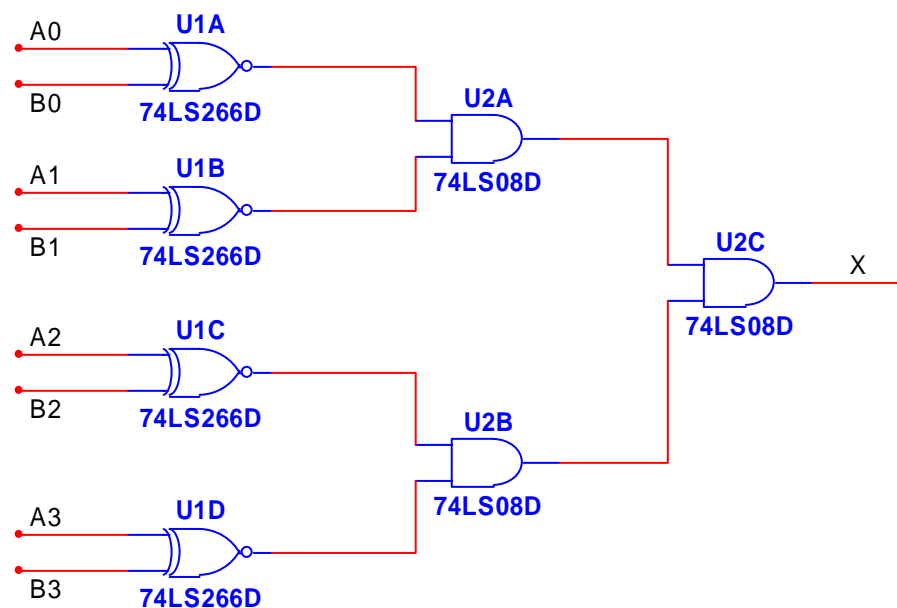


A	B	C	D	X
Off	Off	Off	Off	
Off	Off	Off	On	
Off	Off	On	Off	
Off	Off	On	On	
Off	On	Off	Off	
Off	On	Off	On	
Off	On	On	Off	
Off	On	On	On	
On	Off	Off	Off	
On	Off	Off	On	
On	Off	On	Off	
On	Off	On	On	
On	On	Off	Off	
On	On	Off	On	
On	On	On	Off	
On	On	On	On	

6. XNOR 을 XOR 과 Not gate 를 이용하여 구현해 보고 아래 진리표를 채워보자.

A	B	OUT
Off	Off	
Off	On	
On	Off	
On	On	

7. 아래 회로를 구현해 보고, 그 기능이 무엇인지 말해보자.



8. 아래 회로를 Demorgan 정리를 이용하여
NOR gate 만으로 구현해 보자.

