Create Digital Gates
Brandon Ackerman
11/01/20
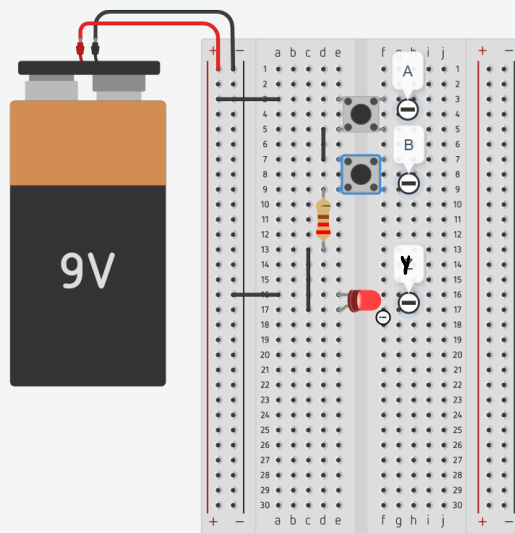
Part A: And Gate
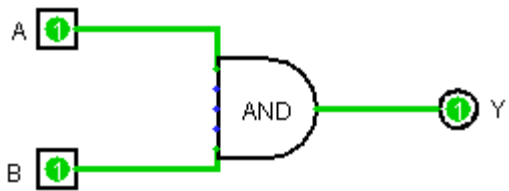
A	B	Y
0	1	0
1	0	0
1	1	1
0	0	0

A∅ B∅

AI BI

AI B∅

BI A∅

9V

9V

9V

9V

Create Digital Gates
Brandon Ackerman
11/01/20

Part B: OR Gate

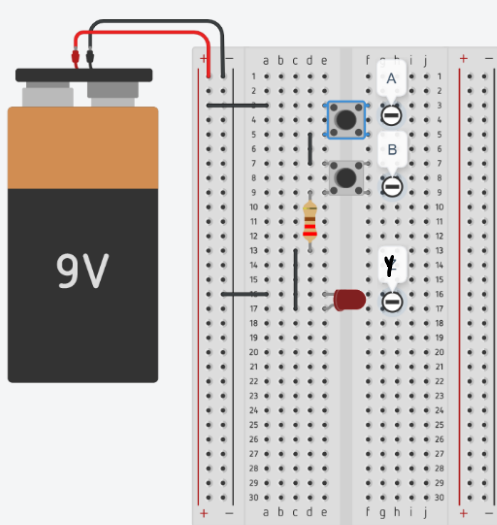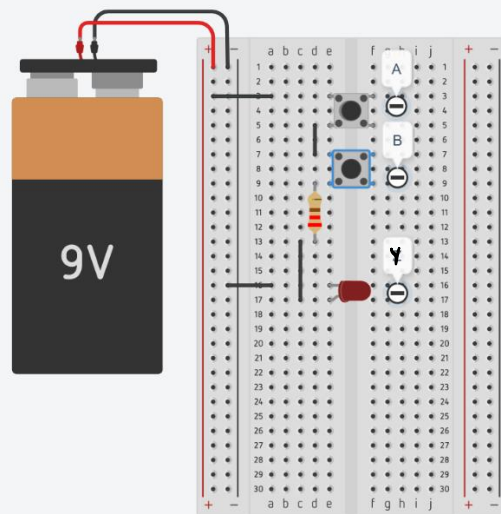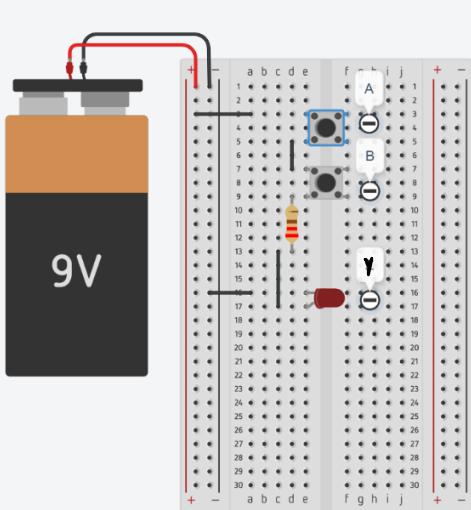| A	B	Y
1	0	1
0	1	1
1	1	1
0	0	0

AØ B1

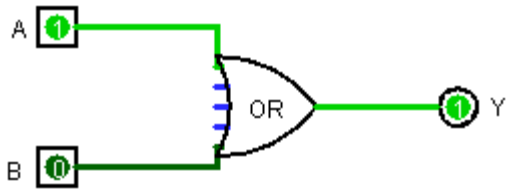A1 BØ
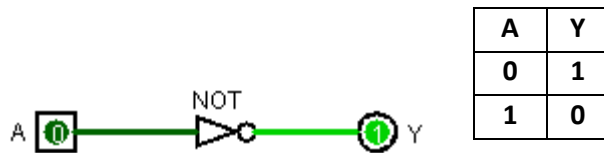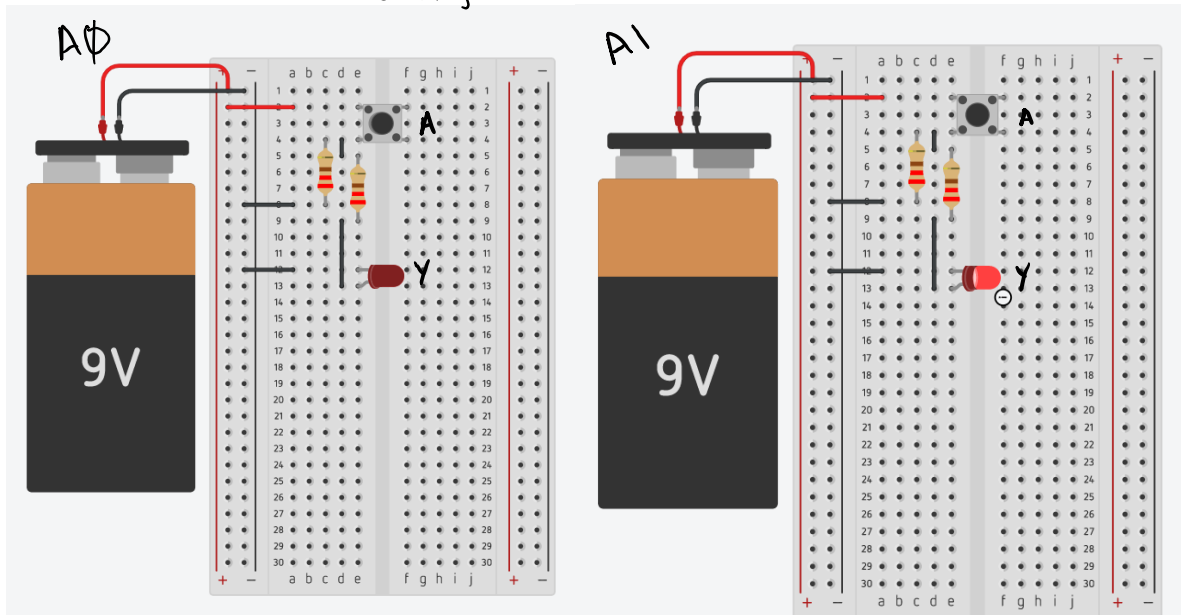
A1 B1

AØ BØ

Create Digital Gates
Brandon Ackerman
11/01/20

Part C: NOT Gate

A	Y
0	1
1	0

NOT

A ⓪────▷o─── ① Y

Configuration A:

A∅

9V

A1

9V

A∅

Configuration B:

A1

9V

9V
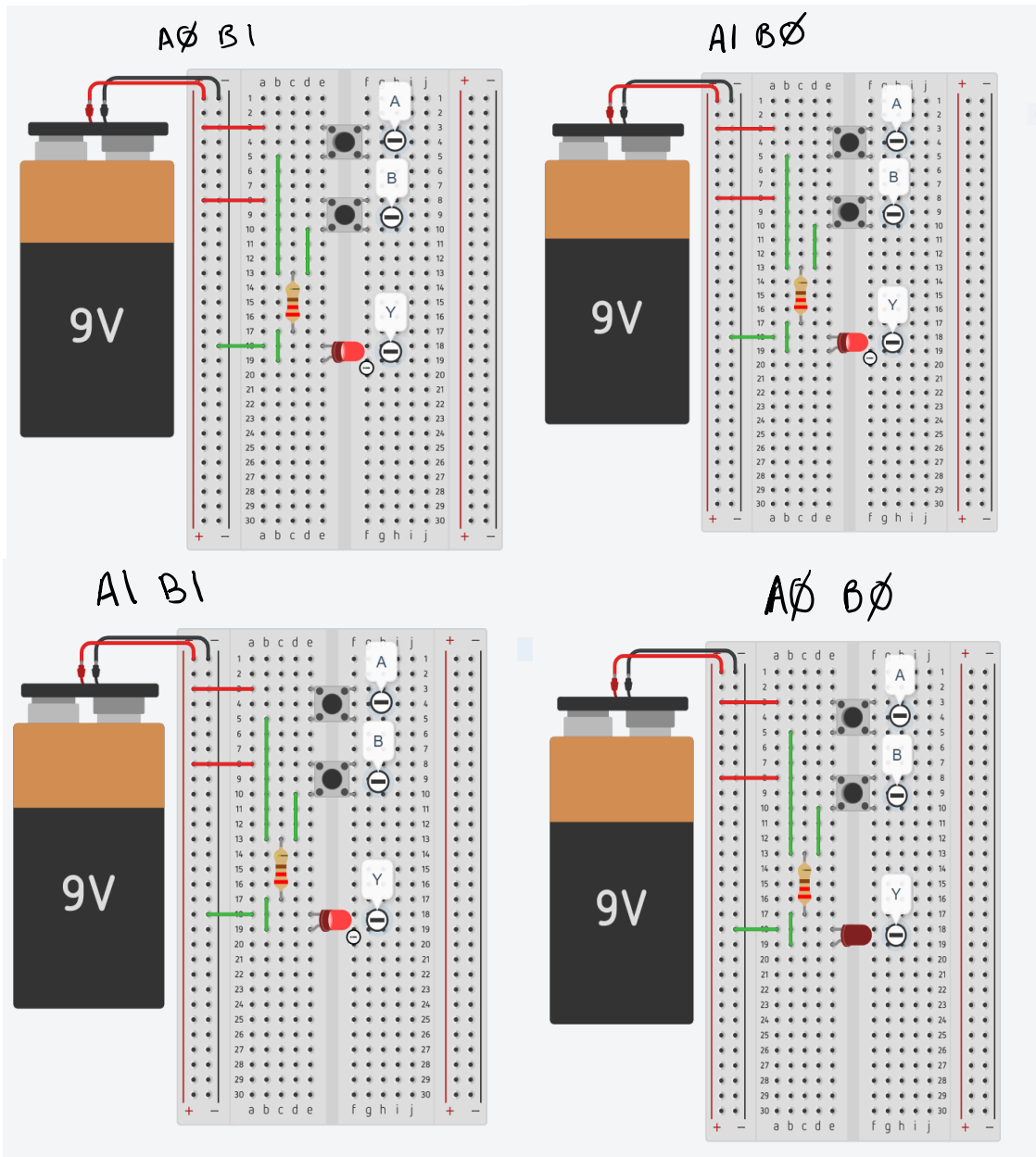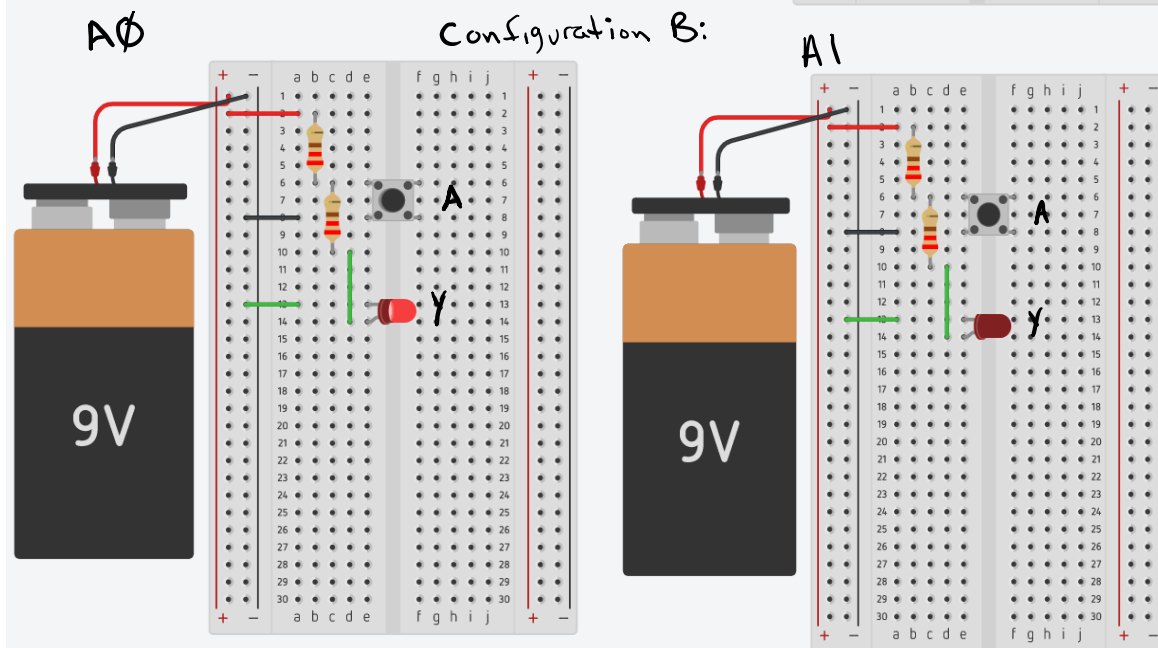
Part D: Construct Digital Logic Circuit from Boolean Expression ((A' + BC)(AB + C')')'

((A'+BC)(AB+C')')'
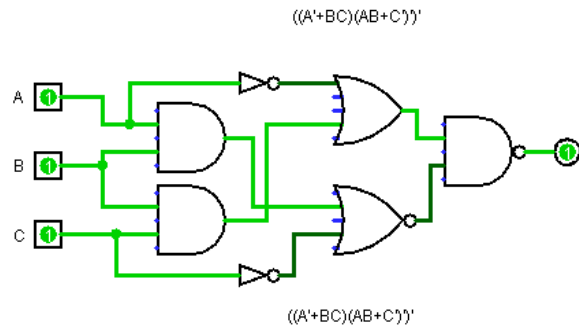
A	B	C	Y
1	1	1	T
1	1	0	T
1	0	1	T
1	0	0	T
0	1	1	F
0	1	0	T
0	0	1	F
0	0	0	T

((A'+BC)(AB+C')')'

((A'+BC)(AB+C')')'

((A'+BC)(AB+C')')'

((A'+BC)(AB+C')')'

((A'+BC)(AB+C')')'

((A'+BC)(AB+C')')'

((A'+BC)(AB+C')')'