Representing Binary Numbers Using Switches

1 switch (2 to the 1st power = 2):

	Switch
Combination 1:	Up
Combination 2:	Down

2 switches: (2 to the 2nd power = 4)

	Switch 1	Switch 2
Combination 1:	Down	Down
Combination 2:	Down	Up
Combination 3:	Up	Down
Combination 4:	Up	Up

3 switches: (2 to the 3rd power = 8)

	Switch 1	Switch 2	Switch 3
Combination 1:	Down	Down	Down
Combination 2:	Down	Down	Up
Combination 3:	Down	Up	Down
Combination 4:	Up	Down	Down
Combination 5:	Down	Up	Up
Combination 6:	Up	Up	Down
Combination 7:	Up	Down	Up
Combination 8:	Up	Up	Up