

### Designing an Exclusive-NOR gate

1. Design a logic system made from AND, OR and NOT gates which has this truth table.

| B | A | Q |
|---|---|---|
| 0 | 0 | 1 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

2. Assemble the circuit on breadboard. Make sure that you have connected each i.c. to the +5 V and 0 V power supply rails.
3. Use the arrangement of switches and LED shown below to test the circuit once you have assembled it on breadboard.

