**Farmer Giles' Lost Sheep Circuit
Silver Task**



All the sheep from belonging to Farmer Giles have escaped from his farm to a nearby hillside, where they have joined other sheep. He wishes to recover all his sheep and knows the following:

* NOT one of his sheep is black as he believes these to be unlucky.
* AND all his sheep are branded 'G', OR have a collar

Using the following:

B = black sheep
G = branded 'G'
C = has a collar
F = belongs to Farmer Giles

a) Draw a truth table from these conditions to show those sheep owned by Farmer Giles.

b) From your table produce a Boolean expression to represent those sheep owned by Farmer Giles

c) Build a logic circuit on logic.ly that is capable of carrying out the expression. Screen shot the final circuit.



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| B | G | C | F |
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**Truth Table**

**Boolean Algebra**

**Circuit**