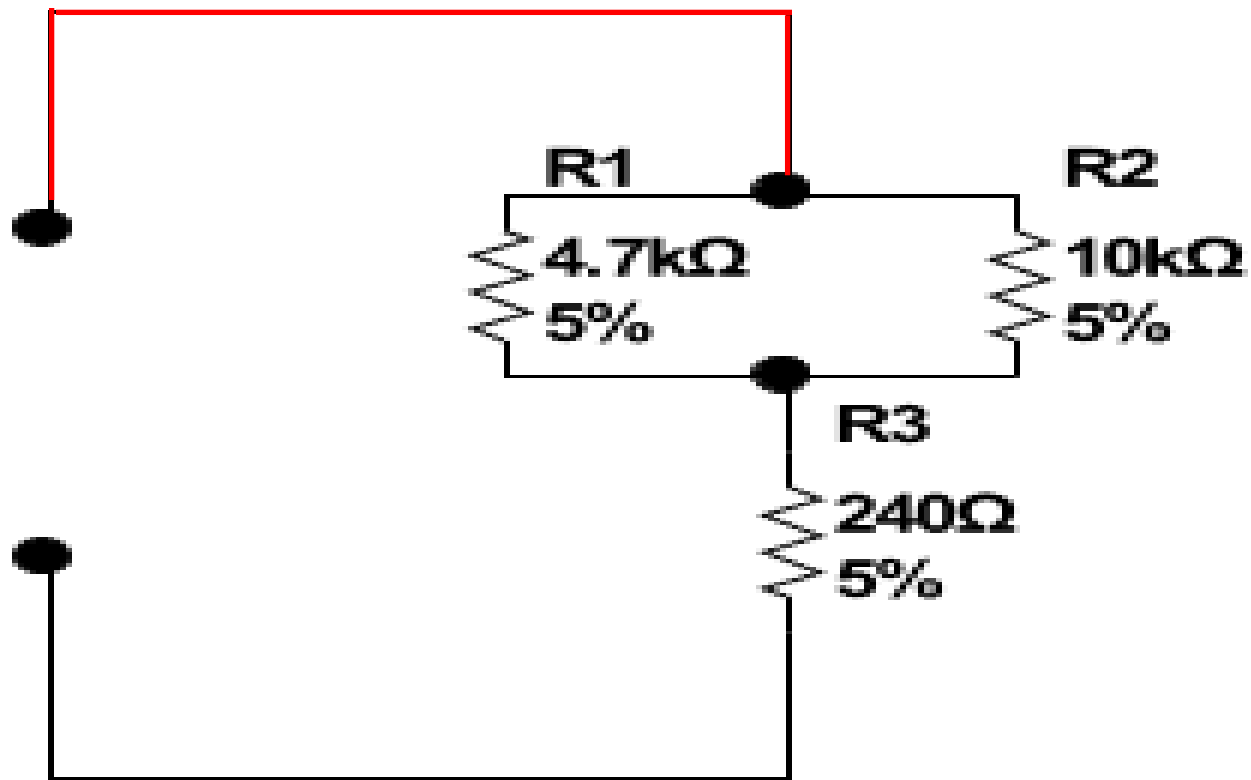


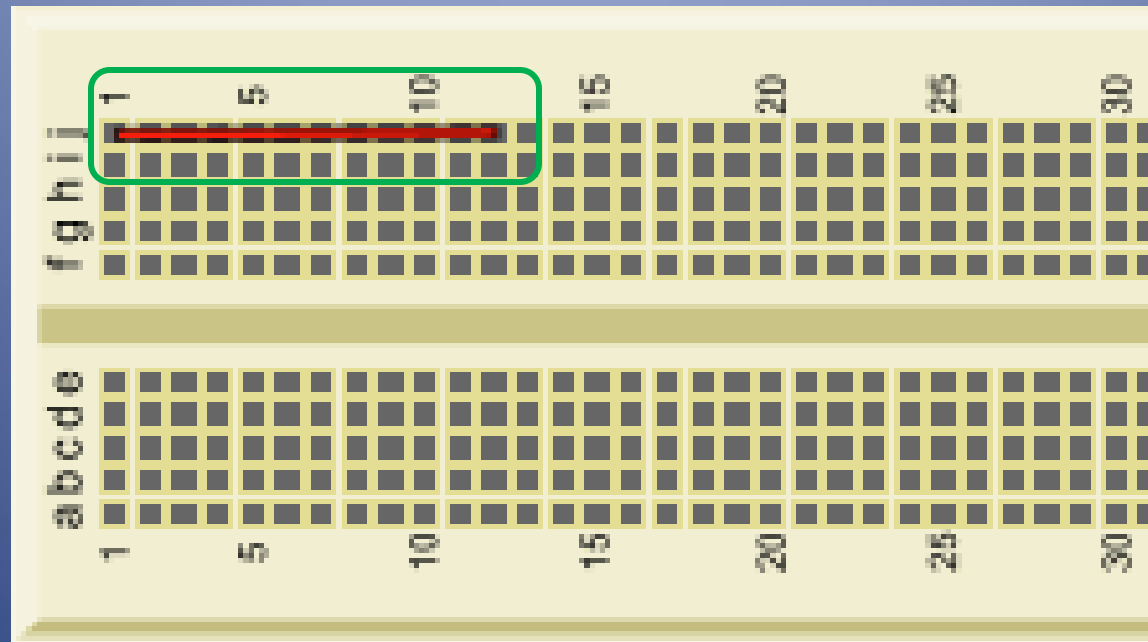
Breadboarding Series Parallel Circuits

We will be breadboarding two
basic circuits using PTL 3 and
PTL 4 breadboards.

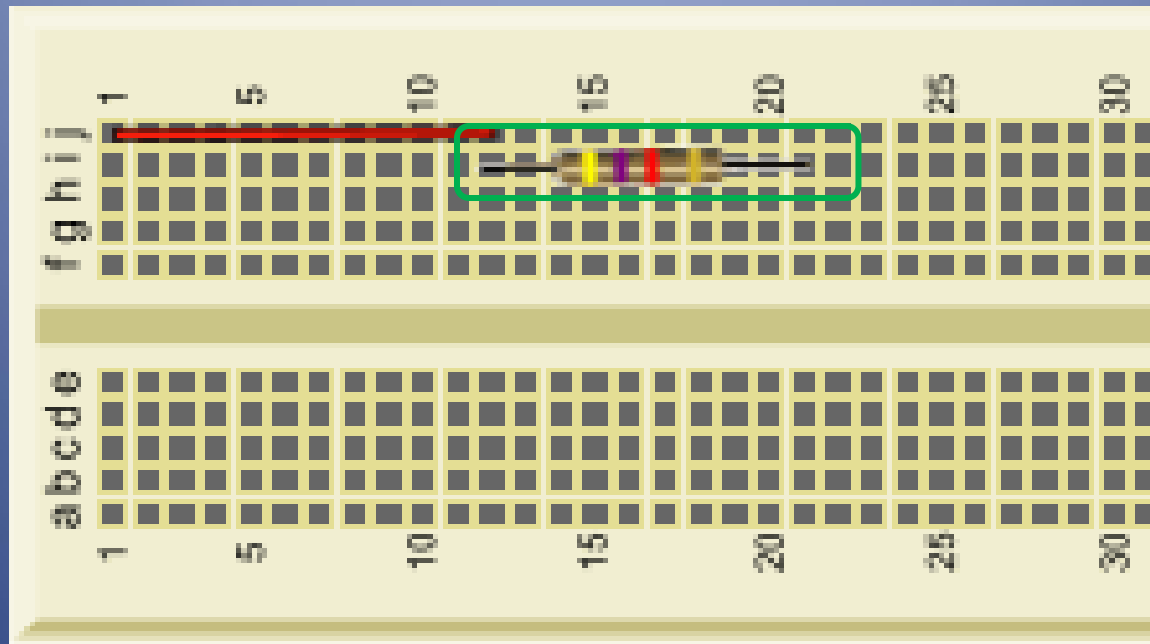
PTL 3 circuit 1, schematic diagram



First insert a connecting wire.

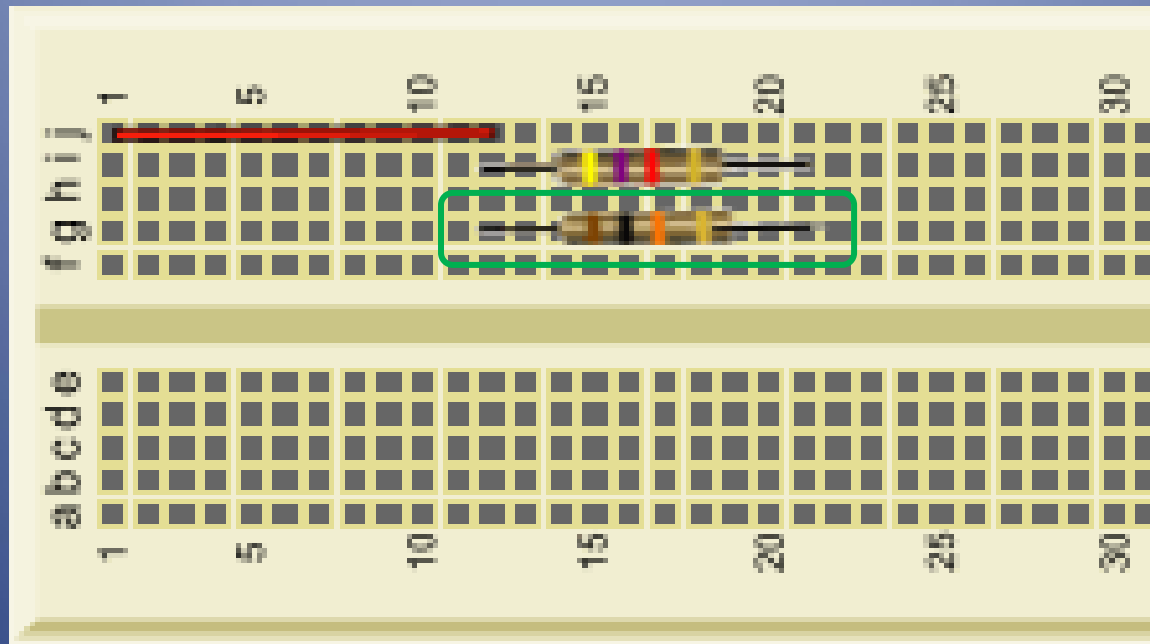


Insert Resistor 1



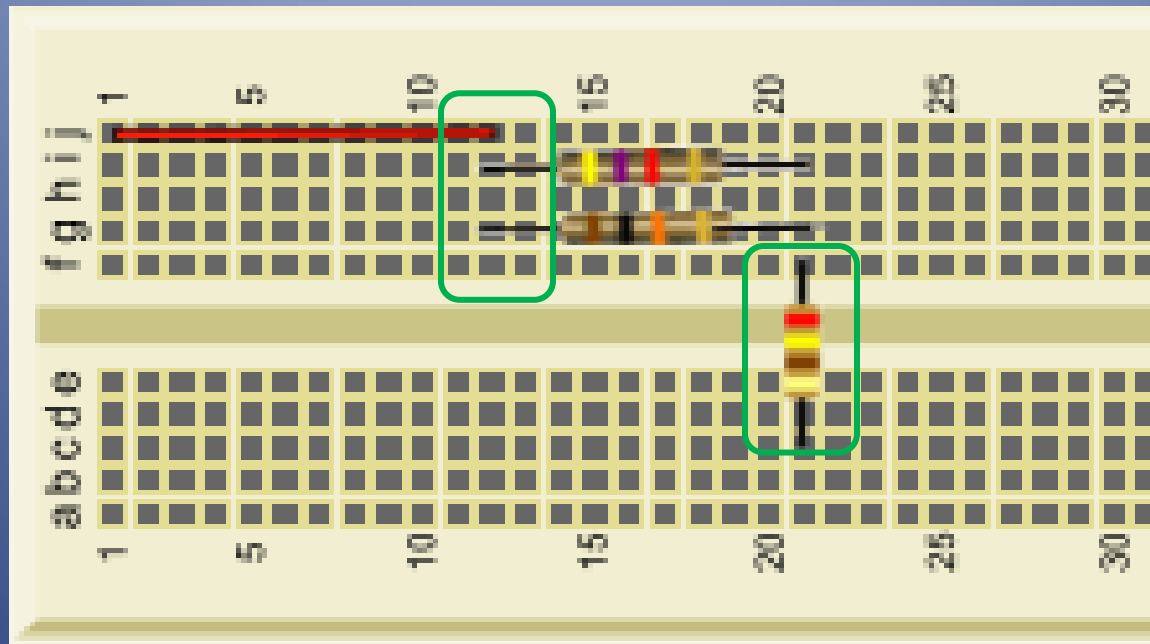
Remember to line up the connections vertically.

Insert Resistor 2



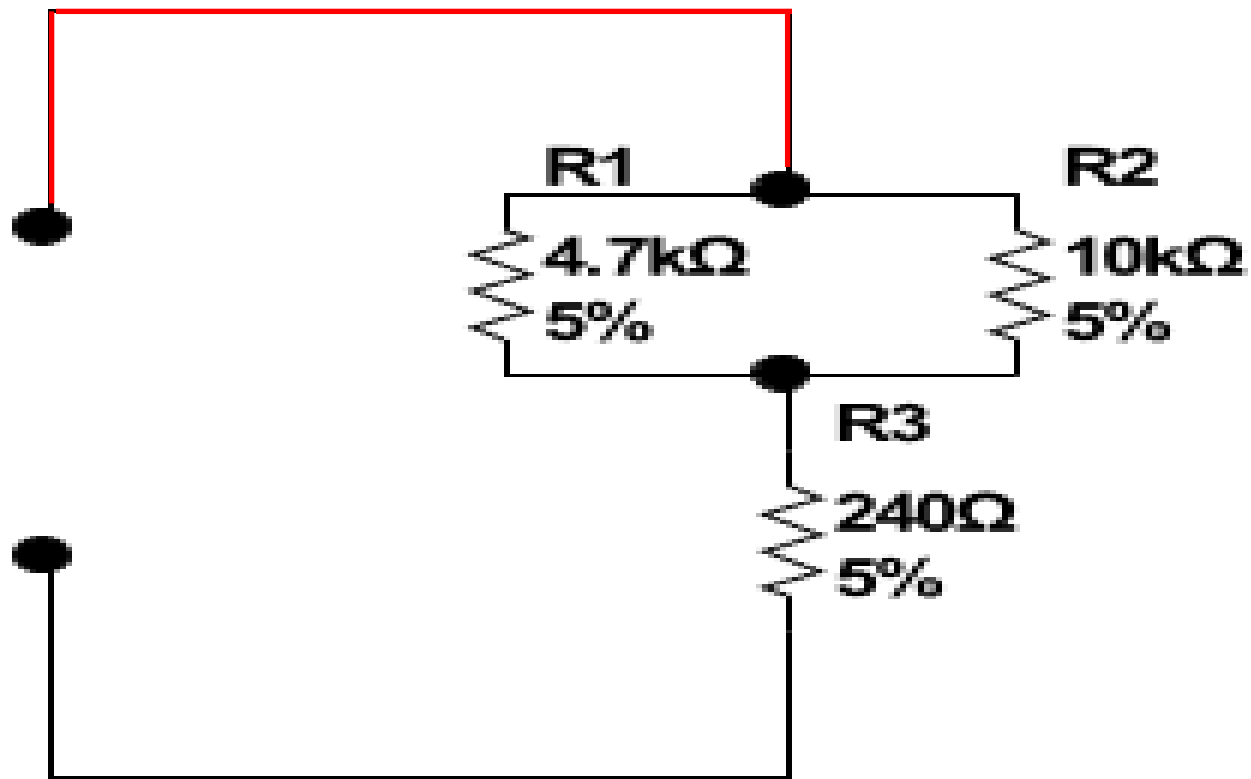
Remember to line up the connections vertically.

Insert Resistor 3

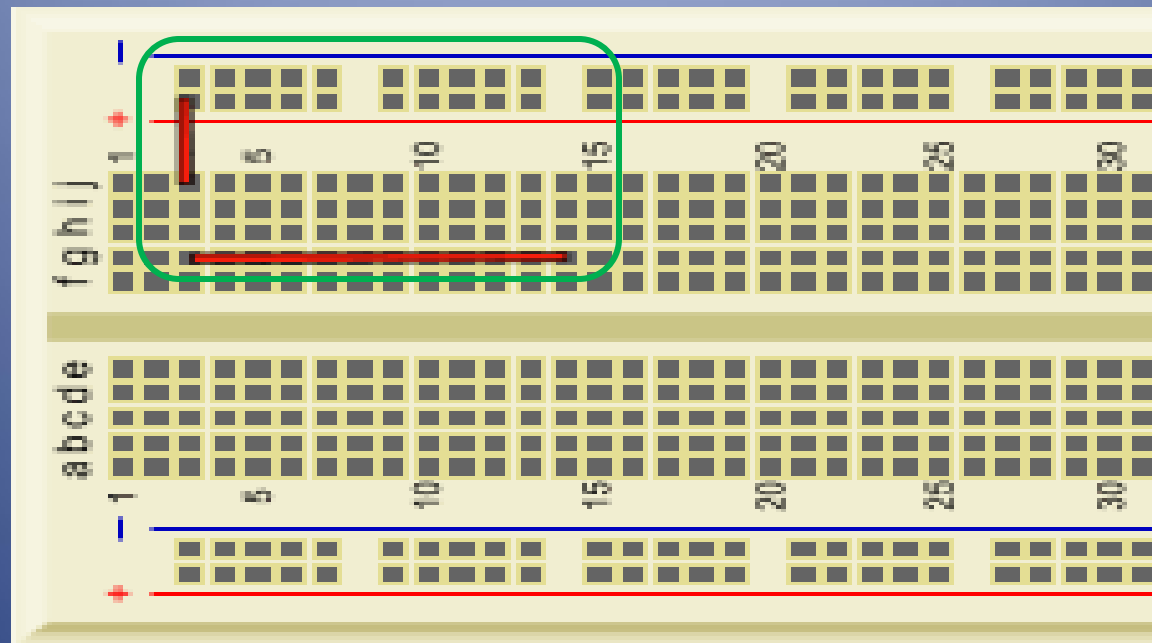


Look at the vertical connections in **12 g – 12 j**.

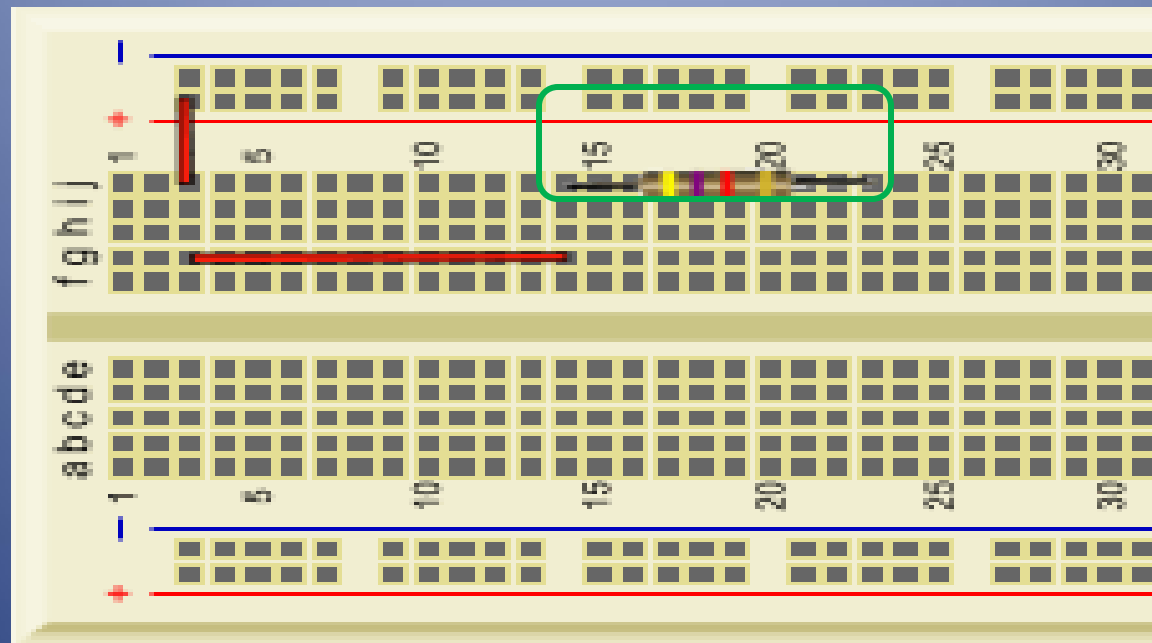
PTL 4 circuit 1, schematic diagram



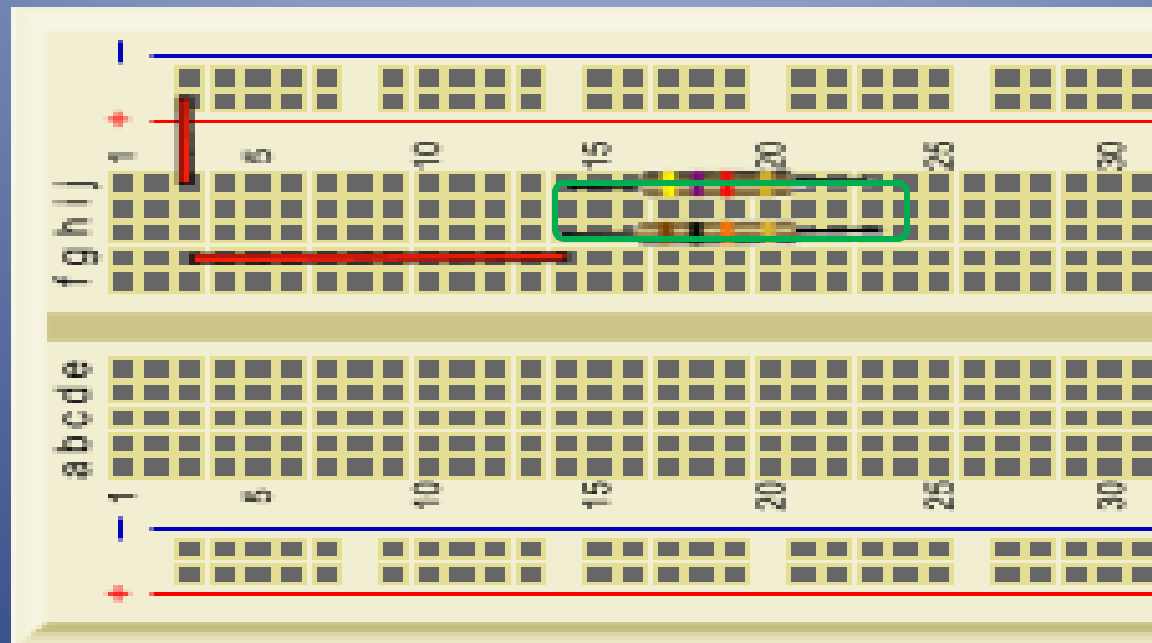
First insert a connecting wire.



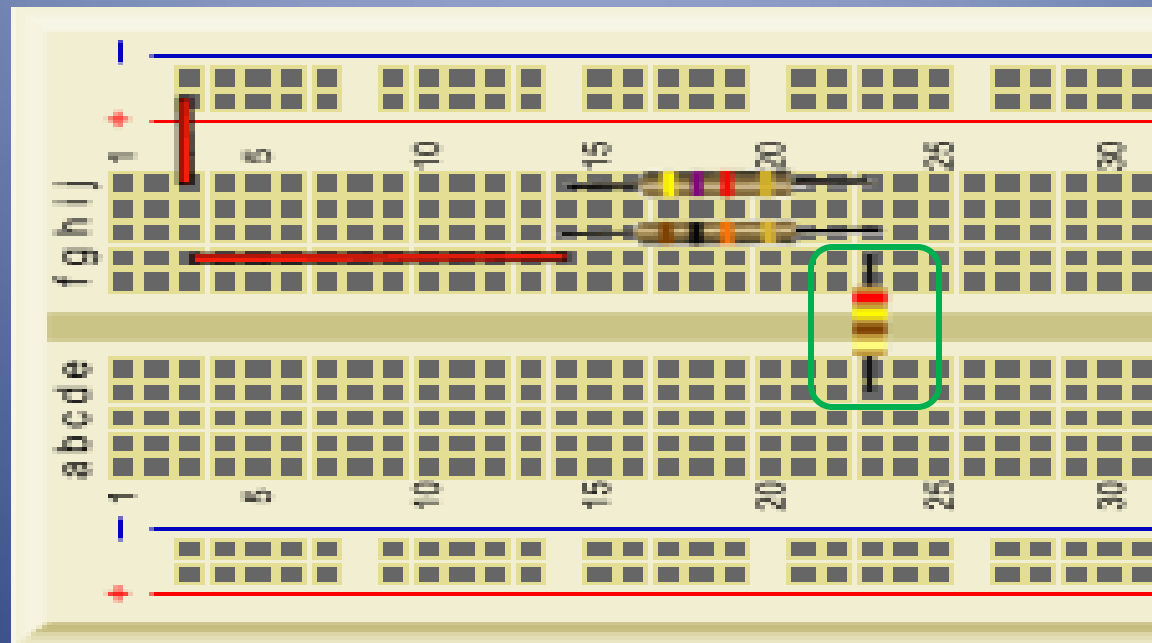
Insert Resistor 1



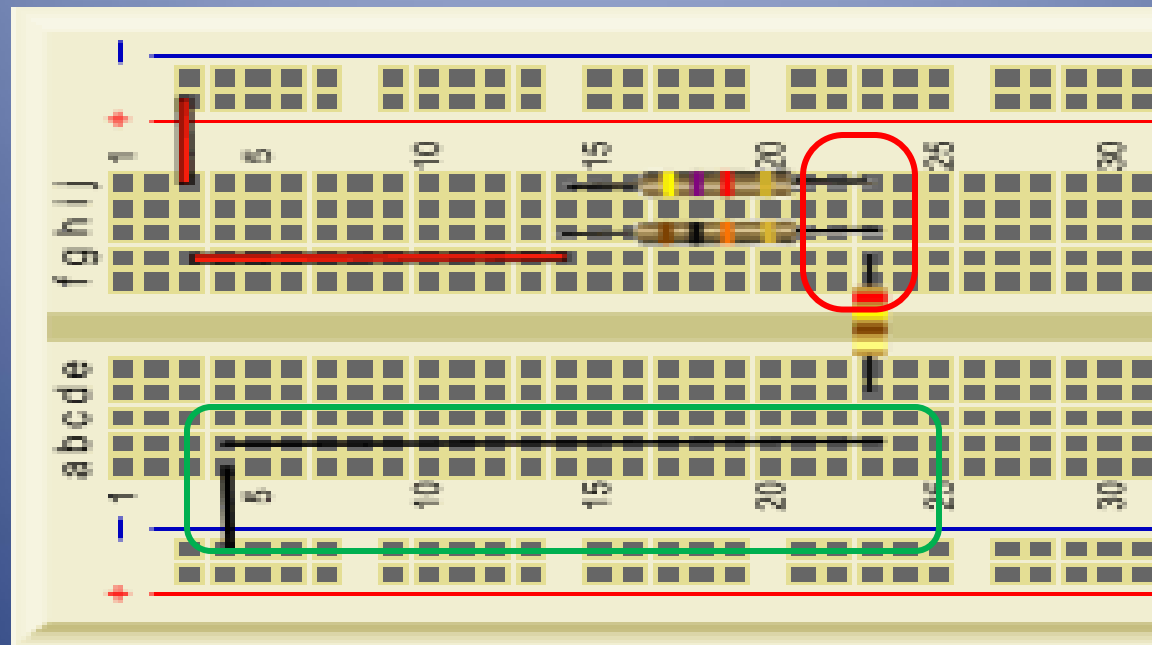
Insert Resistor 2



Insert Resistor 3

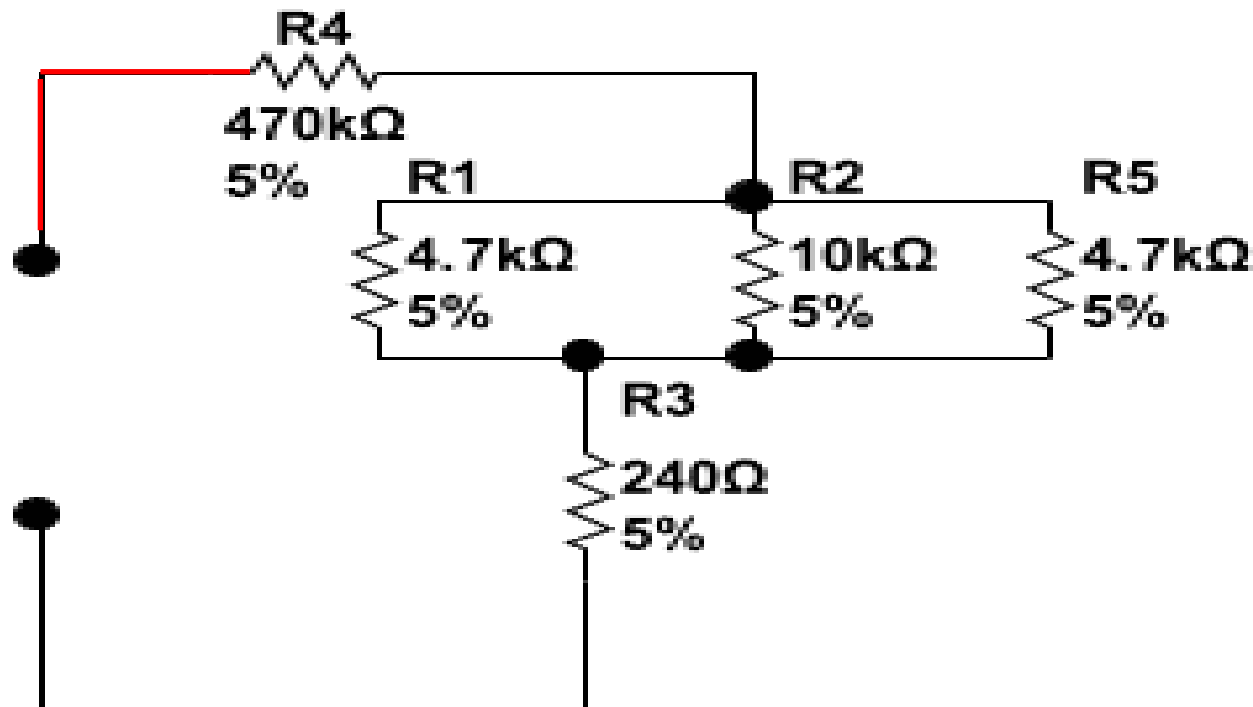


Place last jumper wires, thus circuit 1
on the PTL 4 is complete

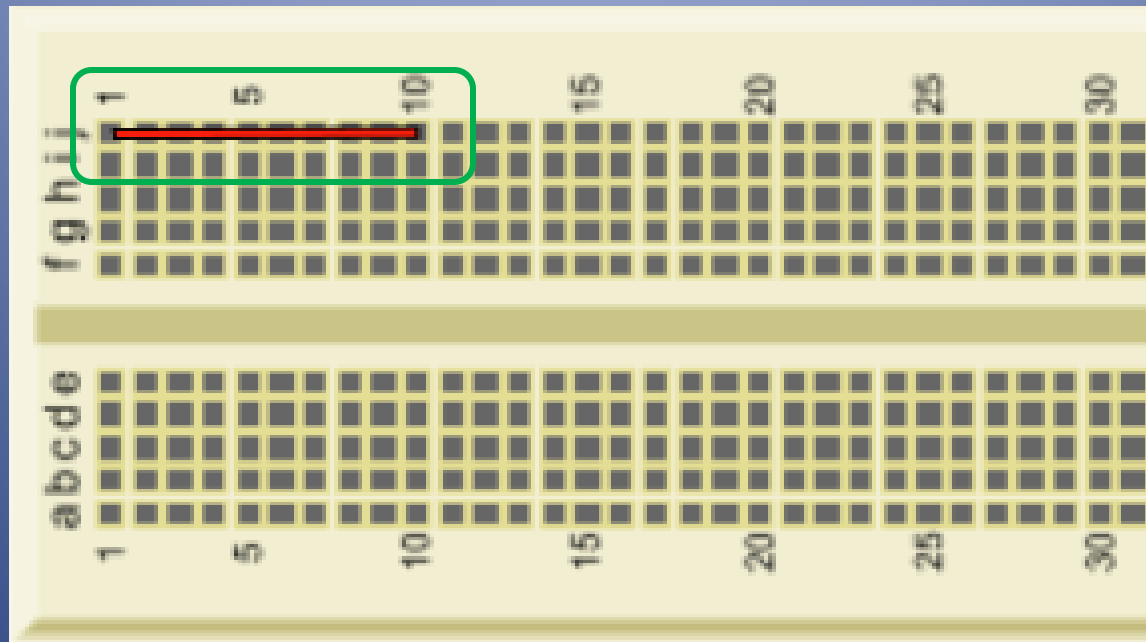


Look at the vertical connections in **21 g – 21 j**

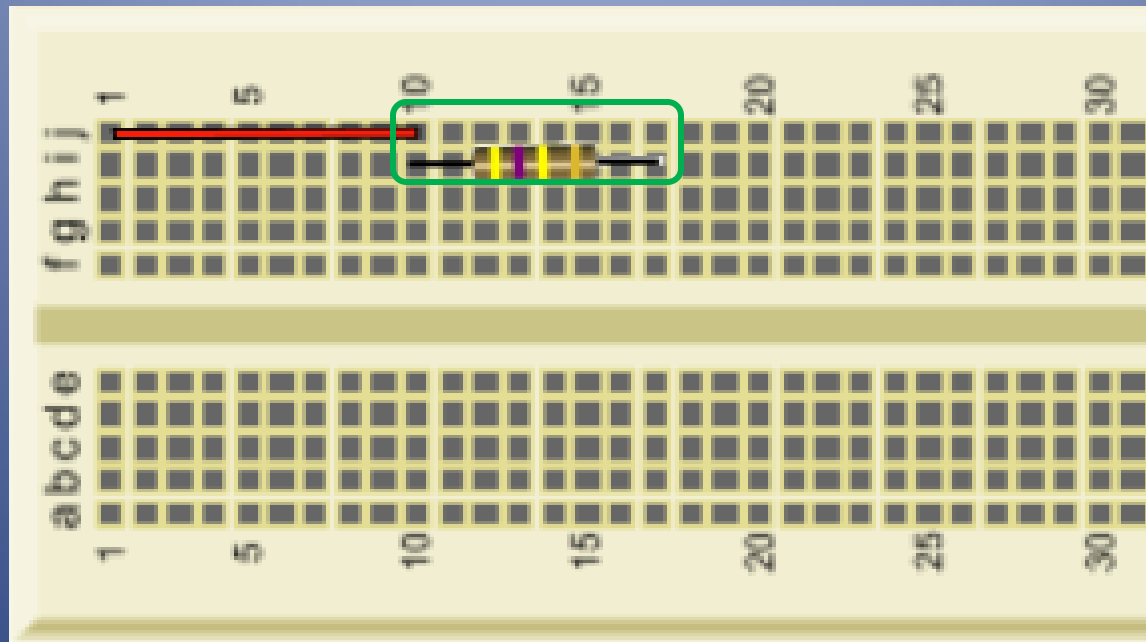
PTL 3 circuit 2, schematic diagram



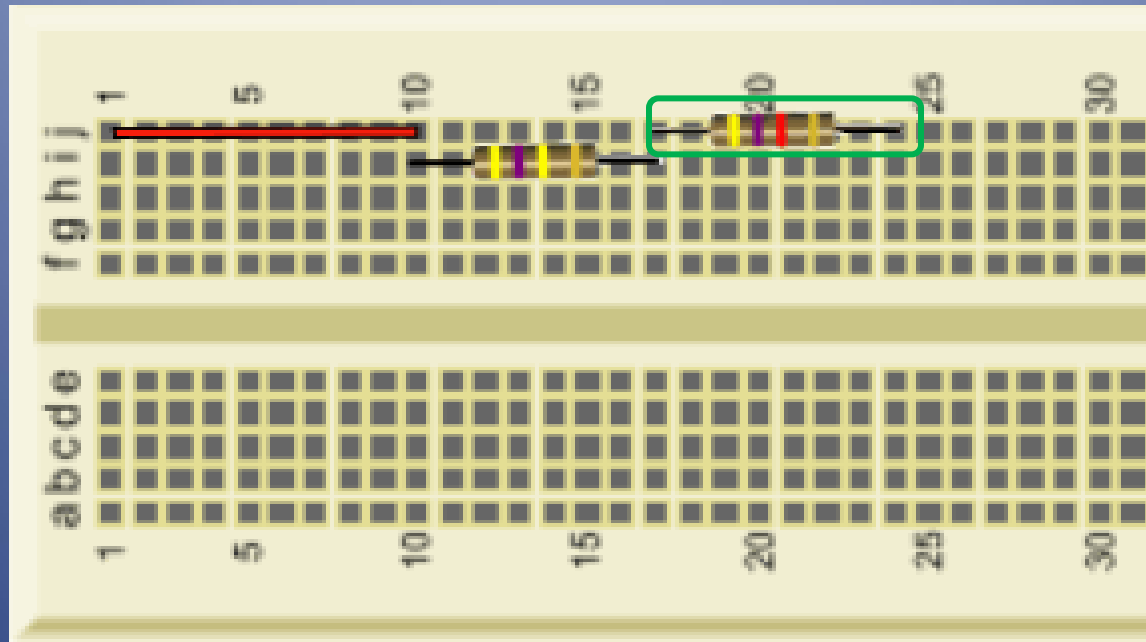
Insert the first jumper wire



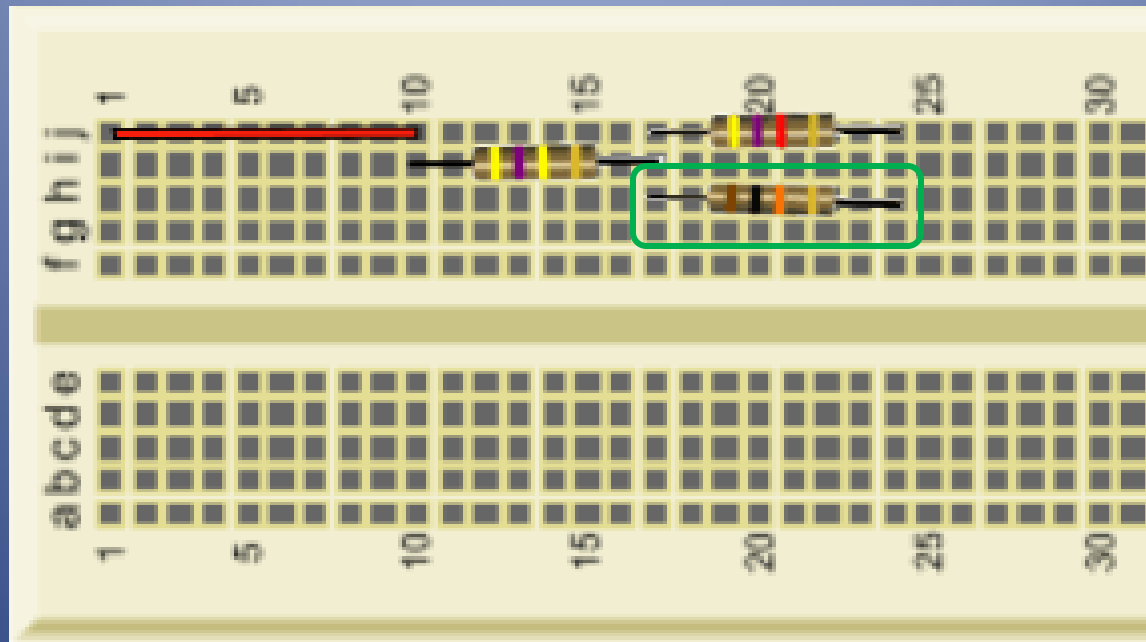
Insert the first resistor



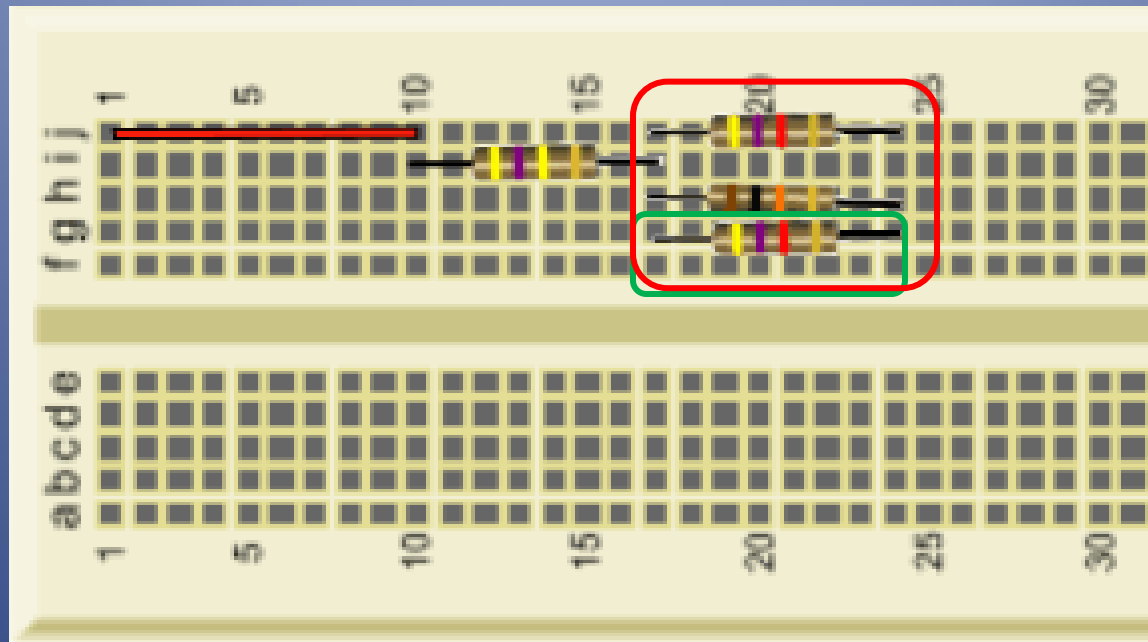
Insert the second resistor



Insert the third resistor

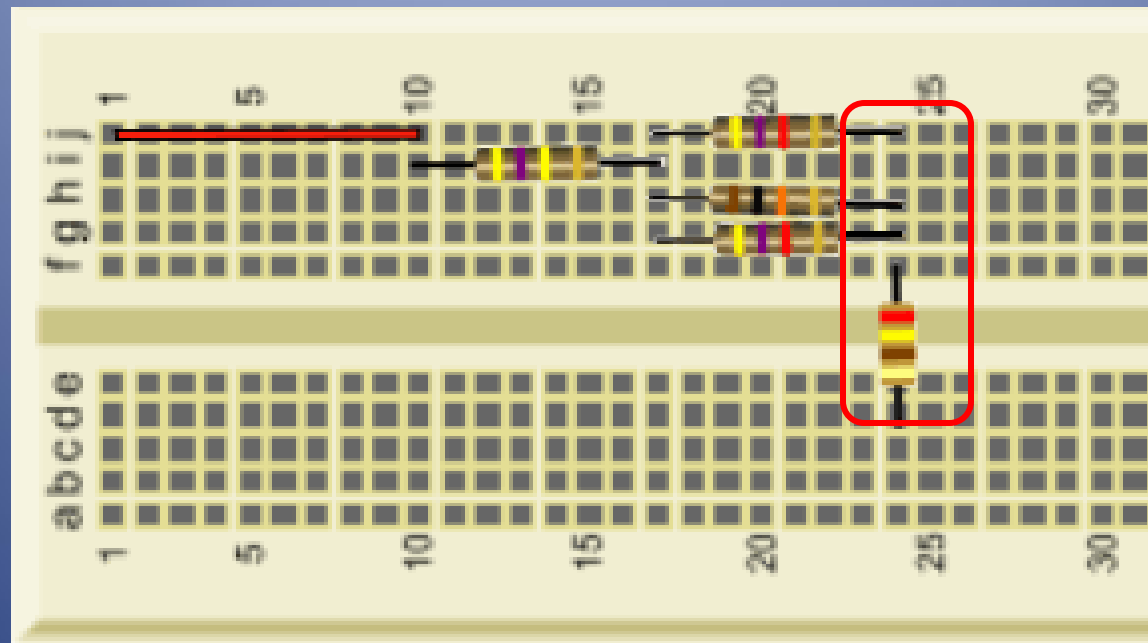


Insert the fourth resistor



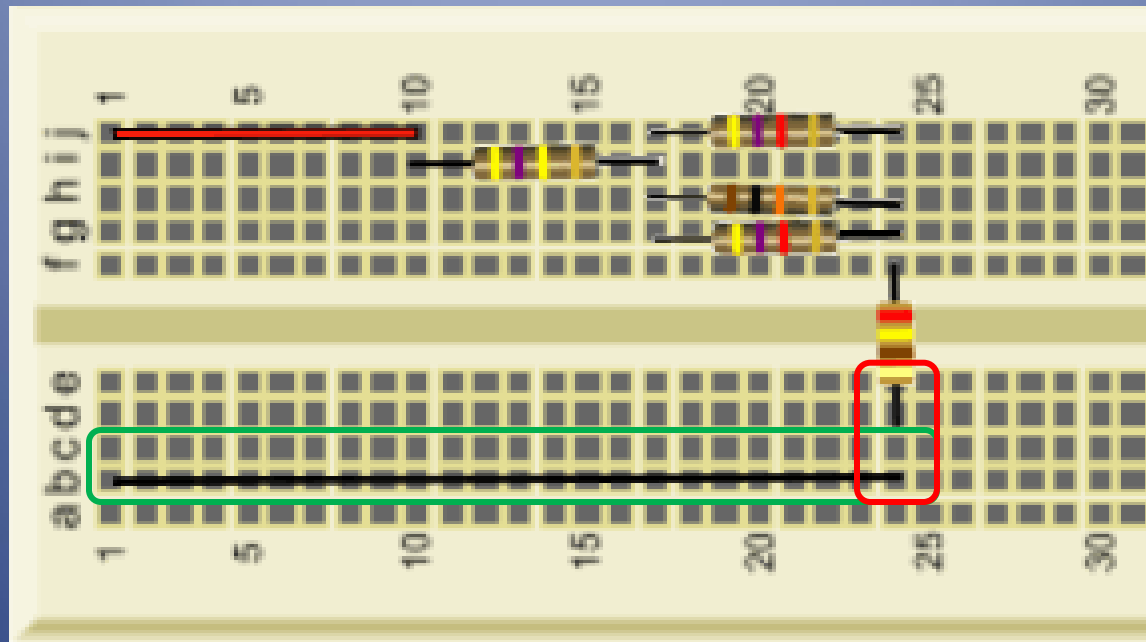
Make sure **R2 – R4** are in parallel.

Insert the fifth resistor



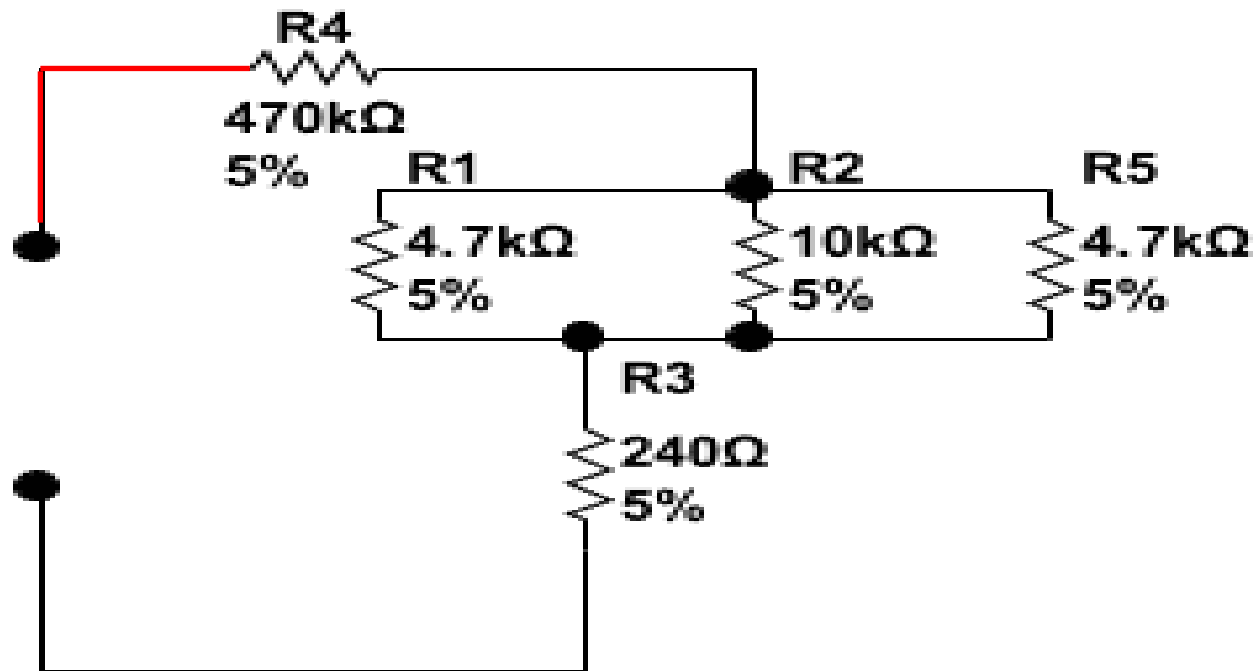
Look at the vertical connections in **21 f – 21 i**.

Insert last wire, thus circuit 2 on PTL 3
is complete

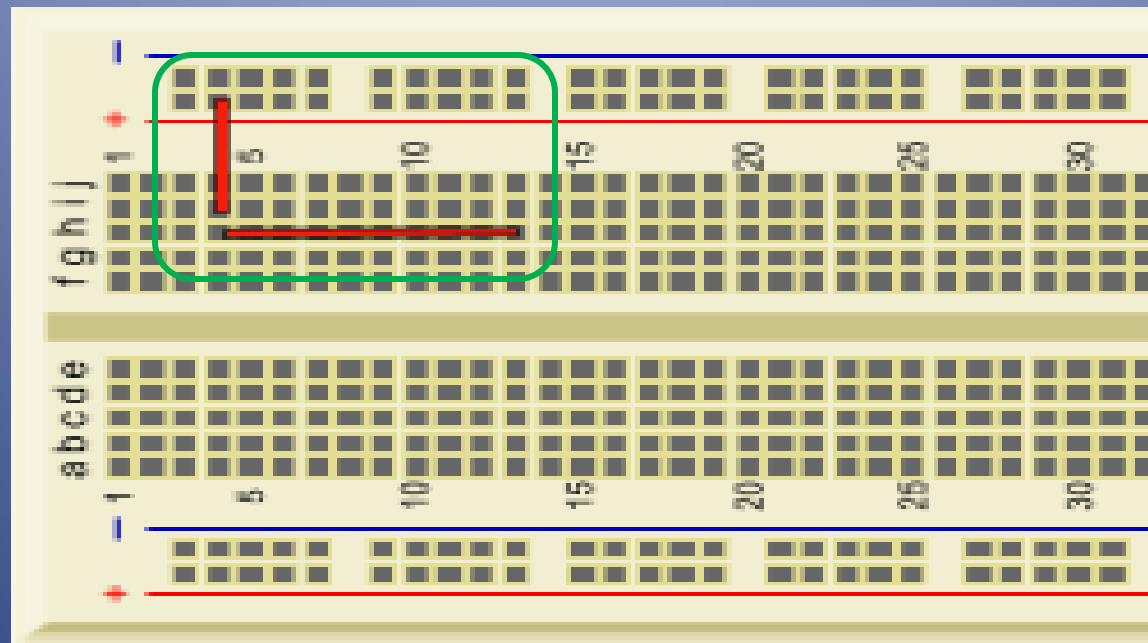


Look at the vertical connections in 21 b & 21 d.

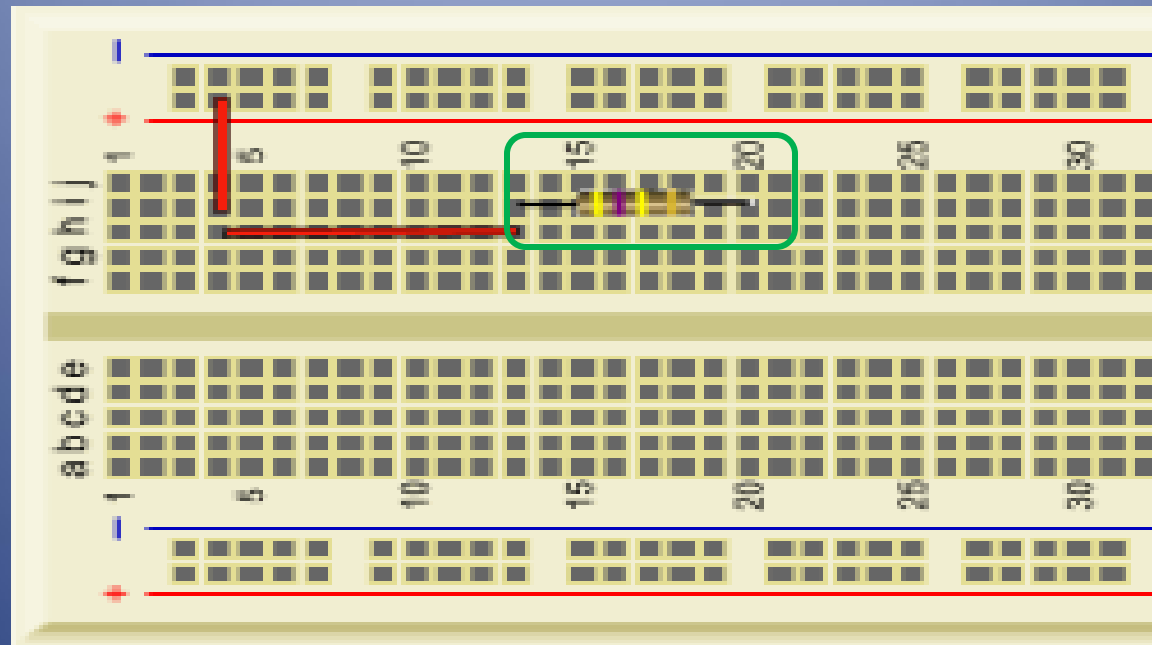
PTL 4 circuit 2, schematic diagram



Insert the jumper wire

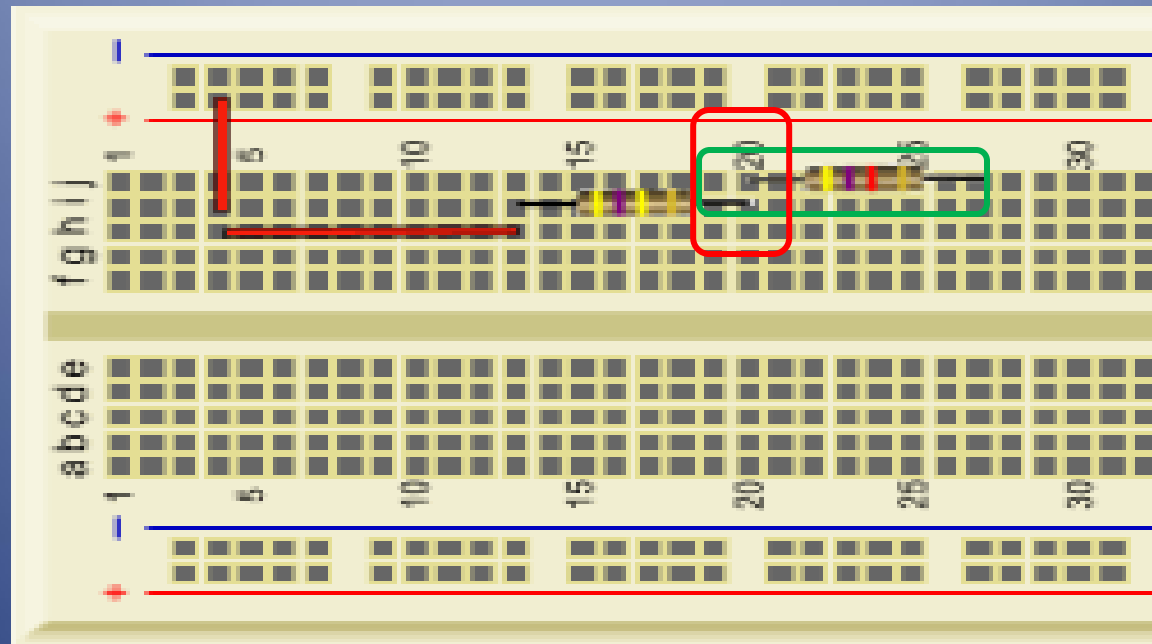


Insert the first resistor



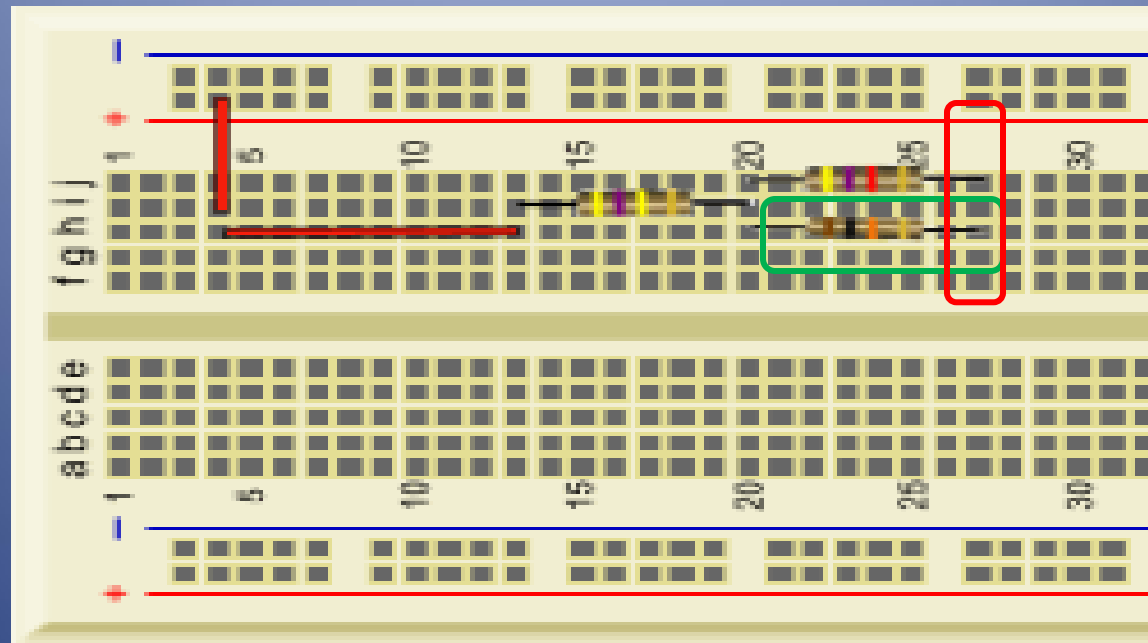
Look at the vertical connections in **13 h** & **13 i**.

Insert the second resistor



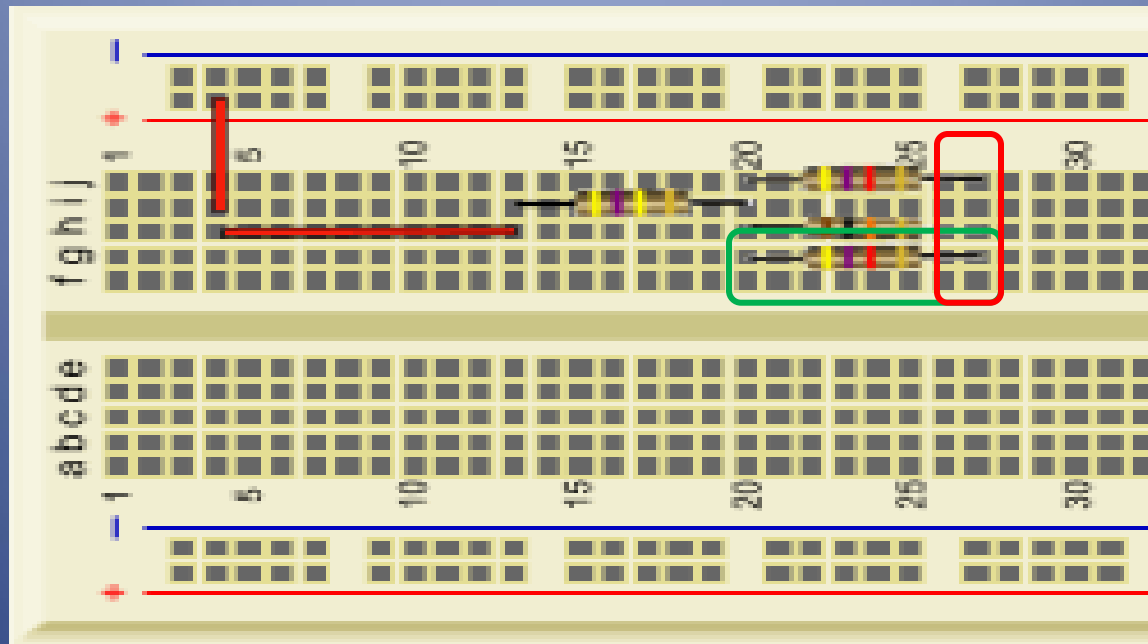
Look at the vertical connections in **20 i** & **20 j**.

Insert the third resistor



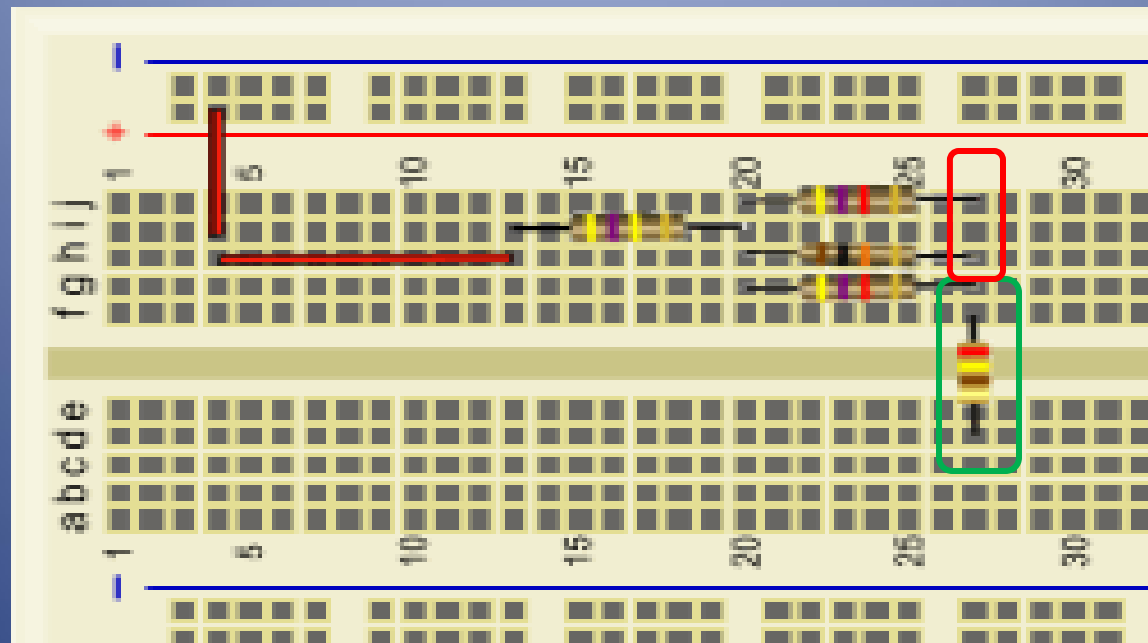
Look at the vertical connections in **27 h & 27 j**.

Insert fourth resistor



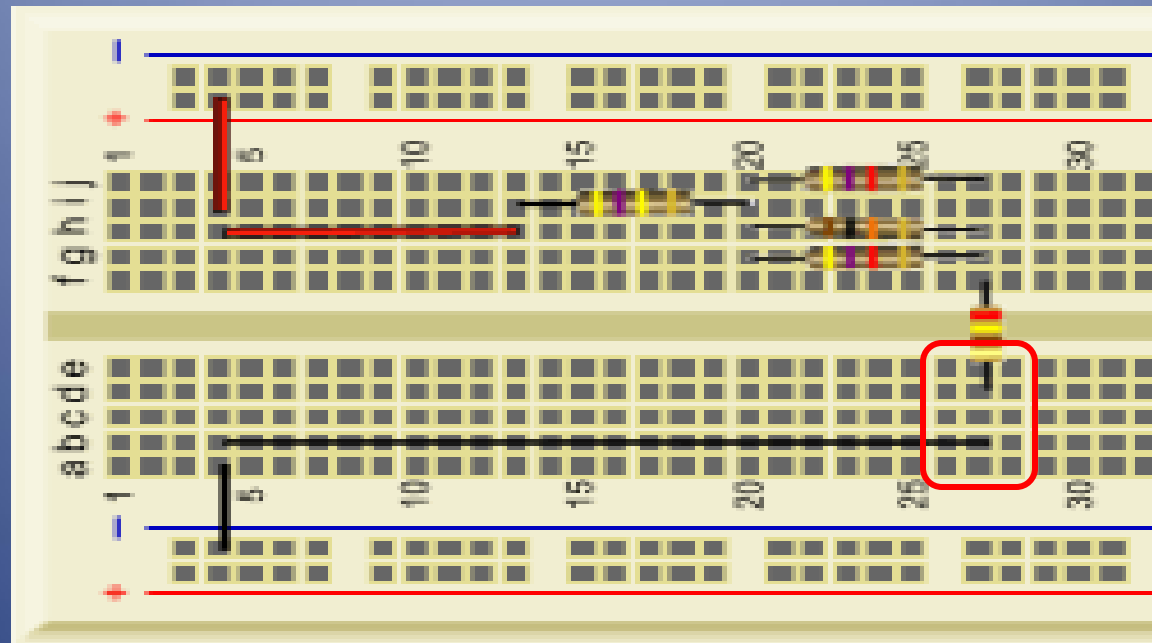
Look at the vertical connections in 21 g – 21 j

Insert the fifth resistor



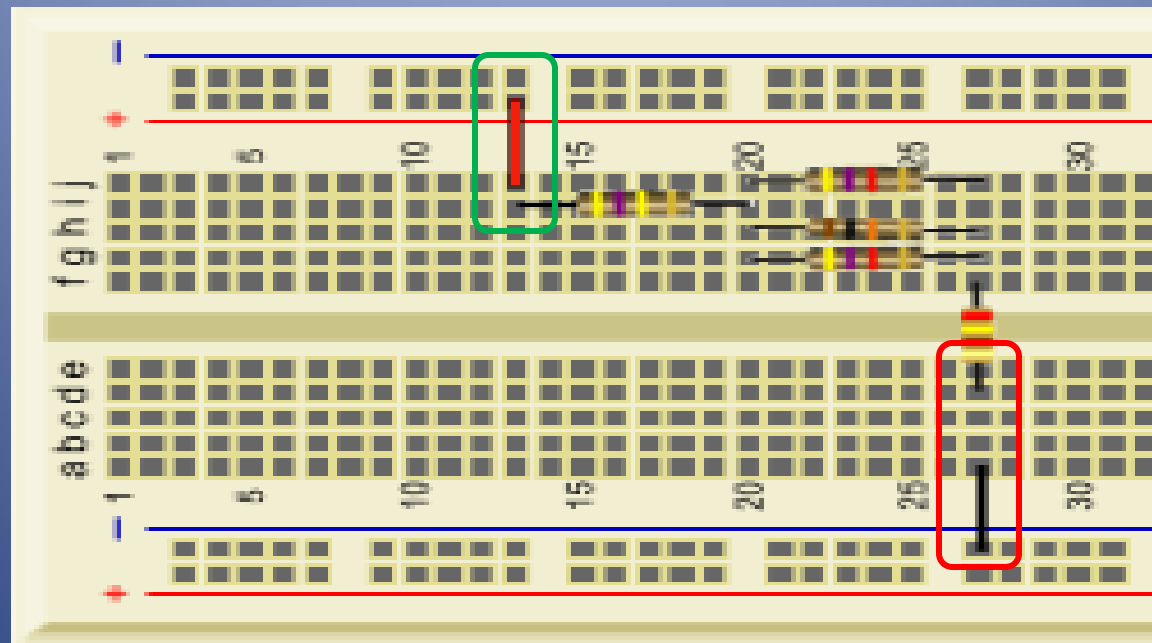
Look at the vertical connections in **21 f – 21 j**

Insert last jumper wires, thus circuit 2
on PTL4 is complete



Look at the vertical connections in **27 b** & **27 d**.

Completed circuit with the jumper wires slightly different



Look at the vertical connections.

The End

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