

## Scoreboard Sequence of Operation

I am new to writing code and asking for assistance. My current sketch uses a modified scoreboard code (public domain) from Brainy-Bits.com. I am using an UNO for testing, but ultimately will use a NANO.

My goal is as follows—My scoreboard has a single, 8 digit, 7-segment display driven by Max7219 chip. The rightmost 4 digits are used for a “BONUS SCORE”. The leftmost four digits are used for

“TOTAL SCORE”. Sequence is as follows: (Using nano) – Uno if required...

We start with both 4 digit displays showing “0000 0000”.

When “holeState1” goes HIGH, (D2) I need to place a “100” in Bonus and begin countdown (in seconds). Accuracy can be approximate.

When “holeState2” goes HIGH, (D3) the current value in “BONUS SCORE” needs to be moved to “TOTAL SCORE” (does not countdown at any time) and the new “BONUS SCORE” value is set to “200” and begins countdown.

When “holeState3” goes HIGH, (D4) the current “BONUS SCORE” value needs to be moved AND ADDED to “TOTAL SCORE” and the new “BONUS SCORE” value is set to “300” and begins countdown.

When “holeState4” goes HIGH, (D5) the current “BONUS SCORE” value needs to be moved AND ADDED to “TOTAL SCORE” and the new “BONUS SCORE” value is set to “400” and begins countdown.

When “holeState5” goes HIGH, (D6) the current “BONUS SCORE” value needs to be moved AND ADDED to “TOTAL SCORE” and the new “BONUS SCORE” value is set to “500” and begins countdown.

When “holeState6” goes HIGH, (D7) the current “BONUS SCORE” value needs to be moved AND ADDED to “TOTAL SCORE” and the new “BONUS SCORE” value is set to “600” and begins countdown.

When “holeState7” goes HIGH, (D8) the current “BONUS SCORE” value needs to be moved AND ADDED to “TOTAL SCORE” and the new “BONUS SCORE” value is set to “700” and begins countdown.

When “holeState8” goes HIGH, (D9) the current “BONUS SCORE” value needs to be moved AND ADDED to “TOTAL SCORE” and the new “BONUS SCORE” value is set to “800” and begins countdown.

When “holeState9” goes HIGH, (D10) the current “BONUS SCORE” value needs to be moved AND ADDED to “TOTAL SCORE” and the new “BONUS SCORE” value is set to “900” and begins countdown.

When “holeState10” goes HIGH, (D11) the current “BONUS SCORE” value needs to be moved AND ADDED to “TOTAL SCORE” and the new “BONUS SCORE” value is set to “1000” and begins countdown.

When “Winner” (D12) goes high, the current “BONUS SCORE” value needs to be moved AND ADDED to “TOTAL SCORE”, the “BONUS SCORE” will go to “0000”, The “TOTAL SCORE” will remain at the accumulated value and we are done.

The value “0000 0000” will be sent to the 8 digit display when (D1) goes HIGH, and we begin again.

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Right now, I can get the BONUS score for each "holeState(x), copied into "BONUS", and begin countdown. I can also move each current BONUS into score and value stays constant.

I do not know how to do the following –

1. – I need to maintain the proper "SCORE" value, by adding each "moveState(x)" "BONUS" to the "SCORE" .

Since the display is separated into individual digits, I believe I need a subroutine that can add the Hundreds, Tens and Ones properly, or (maybe binary or bytes) which I do not understand how to do.

Your expertise is needed. And I need the sketch to be fully commented, so I can hopefully learn and understand the logic you used.

Thanks,

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