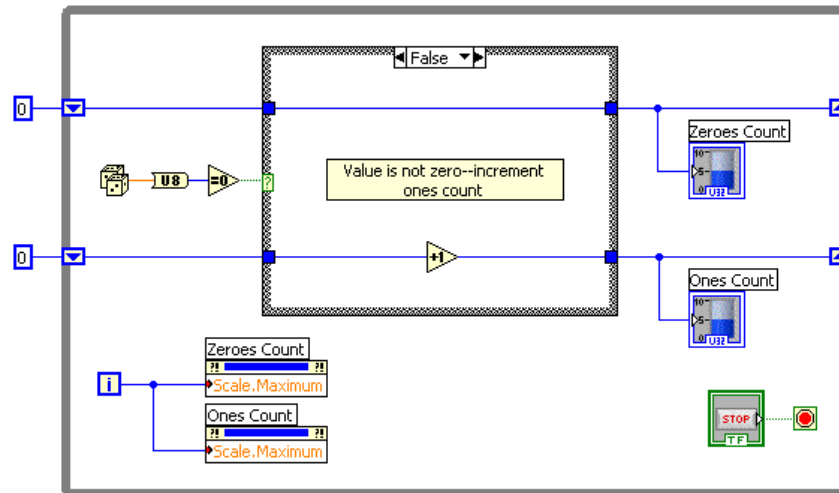# Worked Example: Modified Random Number Statistics

Recall the previous worked example *Random Number Statistics*, where a VI was created to test how random the random number generator in LabVIEW truly is. One version of the VI is as shown below, where property nodes are used to achieve a sort of auto-scale on the tank indicators:

Recall that the property nodes cause a severe restriction on speed as programmed, since they force the front panel to update the tank indicators for every iteration of the loop. Instead, consider the following modifications:
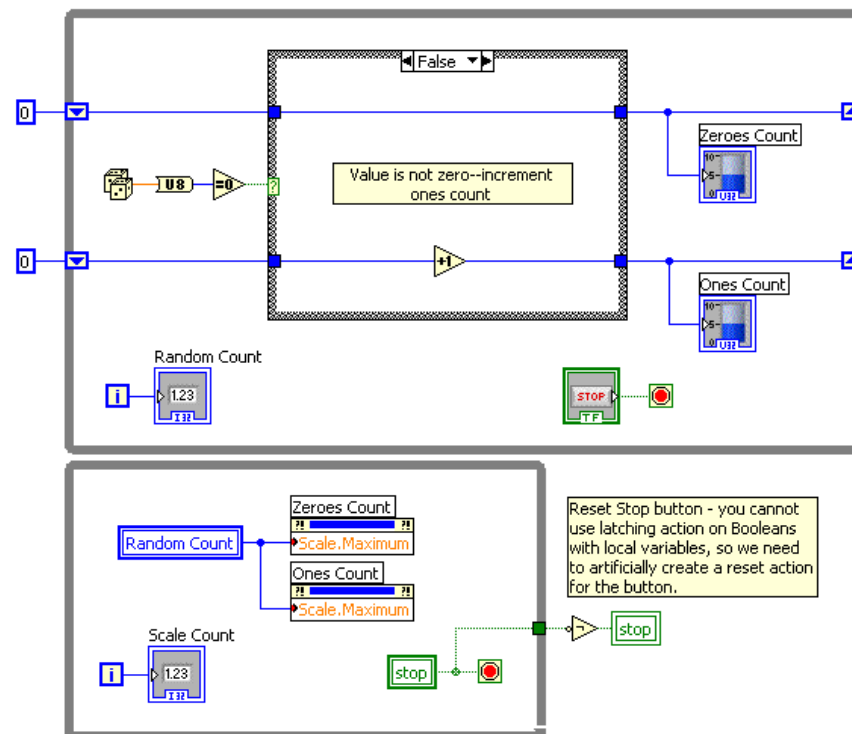
The second loop is allowed to run at an independent rate from the original loop, so the latter does not suffer any speed loss (or at least not nearly as much). Note that you cannot simply wire across the loops to share the *Random Count* information, else the second loop cannot run until after the first loop finishes. Therefore, a **local variable** is used to share data between the loops. Other local variables are used to coordinate the *Stop* action of both loops with one control, which necessitates a slight change in the Boolean action of the button.

Local variables enable the code within any given VI to share data between any number of places without using wires, and therefore without restricting the data flow to that which the wires would ordinarily mandate. Also, because local variables can read or write to the attached front panel object, the concept blurs the distinction between plain controls and indicators (not always to a desirable effect). As a final note, notice how easily LabVIEW enables multiple threads to run more or less simultaneously, simply by placing parallel code on the diagram. This process is not nearly so easy in other programming environments.