

In-Class Exercise: Random Number Alarms

Create a VI similar to the one shown below. The *random num* function is used to generate a random number, which is displayed on the thermometer indicator, and compared against the numeric controls High Alarm and Low Alarm. If the random value is below Low Alarm, turn on the Low Warn light, otherwise leave it off. If it is above High Alarm, turn on the High Warn light, else leave it off. Similarly, turn on the OK light only if both of the Warn lights are off. Additionally:

- Set the high alarm control so that it can only range between 0.65 and 0.95.
- Set the low alarm control so that it can only range between 0.05 and 0.45.
- Set the high and low warn lights to be red when on (warning), and black when off.
- Set the OK light to be green when on, and black when off.
- Include a time delay of 500 msec so that the results can be seen when the VI is run continuously.

