How to Use the Random Number Generator Tutorial

Functions -> Programming -> Numeric -> Random Number (0-1)

The Random Number Generator is a function that outputs a random double precision floating point value (64-bit representation) from 0 to 1, with 52 bits of binary precision, making it very useful for simulations involving guessing or probabilities.

To find the number generator, first open up the Functions palette to the Programming palette. From the Programming palette, select the Numeric palette. Select the Random Number (0-1) function and place it on your block diagram.

Note that if the Random Number Generator is placed in a loop structure, it will generate a new random number between 0 and 1 on each iteration of the loop. Otherwise, if not placed in any structure, the random number generator will simply output a random number once each time you run the entire program.

Also note that if you want a larger random value than the range of the Random Number Generator, try using a Multiply function with a constant to increase the range of the random number generated.

For example, Figure 1 shows how you would wire the random number generator so that it produces a random double value between 0 and 1000.

![Figure 1](image)

Figure 1