**Properties of Log Base 2**

The properties of log base 2 is similar to the logarithmic properties.

* The log of 1 to the base of 2 is always equal to 0. log21=0
* The log 2 to the same base of 2 is equal to 1.log22=1
* The sum of log base 2 to a and log base 2 to b can be combined and written as a single log with a product ab. log2a+log2b=log2ab
* The difference of log base 2 to a and the log base 2 to b can be combined and written as a single log with the division a/b. log2a−log2b=log2a/b
* The log base 2 for a number N can be written as two different logs as log N and log 2. log2N=LogN/Log2
* The log base 2 written with a number in the exponential form can be written as the product of the exponent and the log base 2. log2nk=klog2n