**Millis function in Arduino**

***millis()***

**millis ():** Return the number of milliseconds passed since the Arduino board began running the current program. This number will overflow (go back to zero), after approximately 50 days

* syntax: time = millis()
* Returns: Number of milliseconds passed since the program started. Data typed is **unsigned long.**

\*Note: The data typed of that the return value for millis() is the type unsigned long, logic error may occur if a programmer tires to do arithmetic with smaller data types such as int. Even unsinged long may encounter errors as its maximum value is that its unsigned counterpart.

**The important part:**

How can we reset millis() to zero or something else? The answer is no, we can’t do that. Here is why: if you did, it would potentially break most libraries and functions that rely on it. Generally, the reason people want to reset it, is that they are connected about rollover.

**What is millis() rollover?**

Every millisecond a timer interrupt fires to increment a global variable. When millis() is called, the value of that variable is returned. The data type used is an unsigned long which is 4-bytes or 32bits. This means the maximum value it can hold is 4,294,967,295. Convert that many milliseconds into days and you can see the rollover will occur in 49days.

Will my Arduino lock up?

The answer is not, and it will not effect your project too.

References:

* <https://www.baldengineer.com/arduino-how-do-you-reset-millis.html>
* <https://www.arduino.cc/reference/en/language/functions/time/millis/>
* <https://www.norwegiancreations.com/2017/09/arduino-tutorial-using-millis-instead-of-delay/>
* <https://dzone.com/articles/arduino-using-millis-instead-of-delay#:~:text=A%20well%2Dknown%20Arduino%20function,have%20passed%20since%20program%20start.>