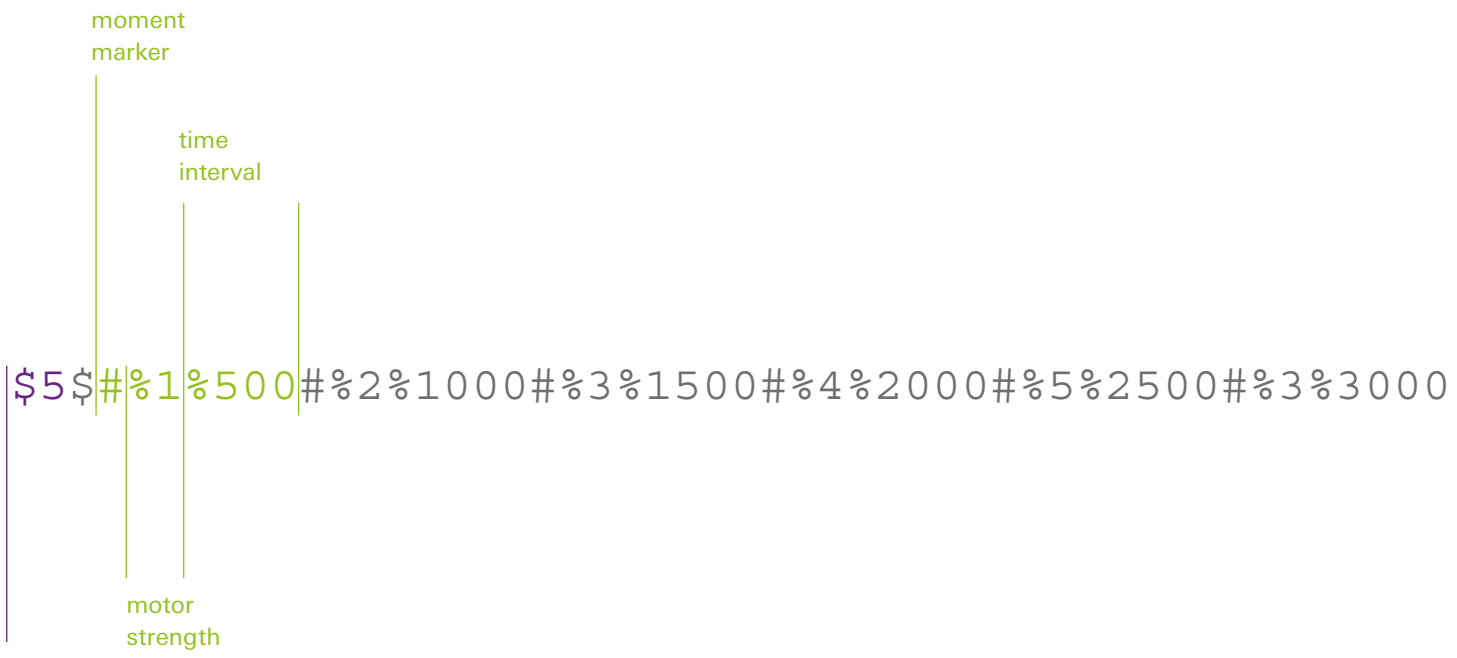
Vibration Motor
String Construction



total number of moments
this is important because getting
the size of an array in c++ is not
an easy endeavor

Vibration Motor
String Saving

Each motor is saved as a new line
in a „text file“

motor 0 #%1%500#%2%1000#%3%1500#%4%2000#%5%2500#%3%3
motor 1 #%1%500#%2%1000#%3%1500#%4%2000#%5%2500#%3%3
motor 2 #%1%500#%2%1000#%3%1500#%4%2000#%5%2500#%3%3
motor 3 #%1%500#%2%1000#%3%1500#%4%2000#%5%2500#%3%3

motor 0 #%1%500#%2%1000#%3%1500#%4%2000#%5%2500#%3%3
motor 1 #%1%500#%2%1000#%3%1500#%4%2000#%5%2500#%3%3
motor 2 #%1%500#%2%1000#%3%1500#%4%2000#%5%2500#%3%3
motor 3 #%1%500#%2%1000#%3%1500#%4%2000#%5%2500#%3%3

then using a for loop, each of the lines
are iterated through to get the values
for each motor (pseudo code)

```
// define before setup
String* momentQueue;
String* tempQueue;
bool isQueued = false;
int i = 0;

// within loop()
do {
        String motor2 = momentQueue[i];
        String motor1 = momentQueue[i+1];
        String motor3 = momentQueue[i+2];
        String motor0 = momentQueue[i+3];

        i+=4;

        // one moment = 500ms
        // so 16*500ms = 8 seconds
        // 8 seconds before we run out
        // of data check the server
        // for more data and queue it
        if( i>(NUM_LINES/NUM_MOTORS)-32 ) {
                if( checkServer() ) {
                        // push the next moments into a
                        // temporary queue array
                        tempQueue = loadNextMoments();
                        isQueued = true:
                }

        }
}
while( i<NUM_LINES/NUM_MOTORS );

// if i is greater than the lines and
// the isQueued flag is true, swap out
// the old moment data for new ones
if( i>NUM_LINES/NUM_MOTORS && isQueued ) {
        momentQueue = tempQueue;

        // reset isQueued flag
        isQueued = false;

        // reset counter
        i = 0;
}
```