**Notes to look into, for a very simple Motor Motion Control application. (by Anind Duttaroy)**

**1.** There is a motor class which has a linear motion, calculated as -

Current position (p) = Previous position + Current Velocity(v) **x** time (in ticks per second).

**2.** The user initiates the motor in the main file – Motion\_Motor\_Control.cpp.

**3.**  The user sets the velocity by giving the command in the command line, for example **“v=2.0”** (that is, “v=” followed by a float/double value, without any spaces) .

**4.**  The motor then starts, and calculates the current position, where the time is measured in 10 ticks per second.

**5.** The user queries the current position, by the command, **“p?”** The user can also query the current velocity by the command, **“v?”**.

**6.**  The user can quit at any time by pressing q.

**7.**  The motion stops when the current position is at 1000.00, and the velocity is set to 0 at that point.

**8.**  **DISCLAIMER** – The calculation of ticks per second and the usage of std::chrono::duration may not be correct, as I did not look much into details of std::chrono::duration .

**9.**  As a result, it is suggested to use velocities between 1.0 to 5.0.

**10.**  The program is in C++, and compiles and runs on Linux. It has been compiled with g++, and also Visual Studio.