## Assignment for November 5, 2018: Make Your Own Music!

Open your Notepad and write your own music notes. The file should be saved as .mus extension instead of .txt

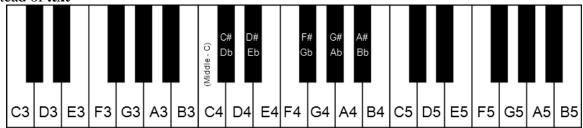


Figure - Musical notes on a keyboard

A **MUS** file must have the following format:

Line #1: Number of musical "lines". Each musical line consists of 3 physical lines

Repeat 2-4 number of musical lines times (Line 1):

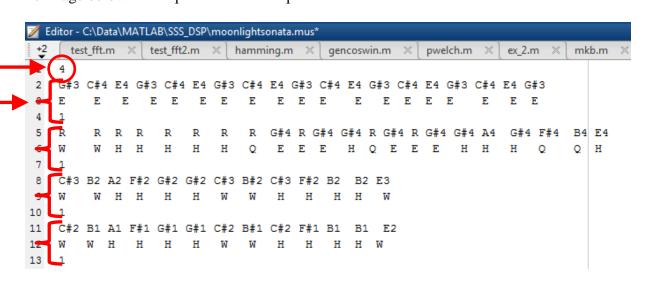
Line #2: A sequence of notes and rests. Valid notes are **A B C D E F G**, optionally followed by a sharp (#) or flat (b) symbol, and an octave number (from 1 to 8). For example, middle C is **C4** and the B-flat immediately below middle-c is **Bb3**. **R** is a rest. The notes **must** be **UPPERCASE** and the 'flat' symbol **must** be lowercase.

Line #3: The duration for each of the notes on line #1. Valid values are:

 $egin{array}{lll} \mathbf{W} & = & & & & & & \\ \mathbf{H} & = & & & & & & \\ \mathbf{Q} & = & & & & & \\ \mathbf{Q} & = & & & & & \\ \mathbf{E} & = & & & & \\ \mathbf{S} & = & & & & \\ \mathbf{S} & \text{ixteenth note} \end{array}$ 

Line #4: Specifies the duration of a quarter note, in seconds (this controls the tempo at which you music will be played).

The image below shows part of a 4 "line" piece of music



Once you have completed your music, save the file as lastname\_firstname\_description.mus. The description can be the name of your music or something descriptive.

Remember that by default, Windows hides the file extension of known file types, so make sure your file name is blah\_blah.mus and not blah\_blah.mus.txt. The Matlab program will not be able to recognize it in this case. If you view files by details, if your name is correct, the file type will be MUS File.

Email the file with the subject SSS - DSP - 2018 to:

## paul.taylor@gulfstream.com

Please email by 6pm on November 4, so that the files can be transferred back to the classroom computers in time for the class.

REMINDER: Bring headphones / earphones / ear buds to the November  $5^{th}$  class to help finishing your music.