* Total 64711457 lines
* Groups of data had similar numbers so I broke them off when the numbers changed significantly. I’m not sure what these grouping mean though
* Picked the first 26 groupings, pasted each grouping into individual columns of an Excel document
  + Some groupings smaller than others
* Splitting data – Segment 1
  + I copied the column of data from Segment 1 into a separate Excel sheet
  + First I thought I had to split it manually so I googled how to transpose data from columns to rows: <https://support.office.com/en-us/article/transpose-rotate-data-from-rows-to-columns-or-vice-versa-3419f2e3-beab-4318-aae5-d0f862209744>
  + Then I realized there must be a better way so I googled how to split cells: <https://support.office.com/en-us/article/split-text-into-different-columns-with-the-convert-text-to-columns-wizard-30b14928-5550-41f5-97ca-7a3e9c363ed7>
  + Split the column of data into four columns, deleted the column of “v.” data, and then rotated it to create three rows of values
* Sonifying Segment 1
  + Tried to copy the first row of data into Music Algorithms (MA), but there were no commas which I thought would be an issue. Tried to use the replace function on the website but it didn’t work.
  + I pasted the Excel data into a word document where it came out looking weird, so I copied the data I had pasted into MA from the Input box into Word, where it came out normal looking
  + I discovered the data wasn’t separated by spaces, but tabs instead. I used the Replace function to replace every tabbed space with a comma and a normal space instead.
  + Decided to just work with one voice to start to make sure it worked.
  + Decided to stick with Division Mapping because it seemed like it would create the most interesting music and frankly I don’t really understand the other two types of mapping from what the info button said
  + Decided to go with a Major C scale instead of a chromatic one
  + Duration input doesn’t seem to make any sense and they said it’s undergoing revision so I didn’t touch it
  + It sounds really weird
  + Decided to go back to the input and see what would happen if instead of multiplying the decimals by 100 to get values under 100, I multiplied by a greater number to see if it creates greater variation in the notes?
    - Multiplied by 1000 instead
    - Compared the data output from the two Pitch Mapping pages for each set of data and the difference is not significant enough to make a difference – some values are the same and some values have changed by one. Decided to stick with multiplying by 100.
  + Went and followed the same process I worked out to input the second and third values of Segment 1
  + Went with a chromatic C scale instead just for kicks
  + It sounds super discordant and actually makes me feel a little anxious. Not sure if it’s the music or a manifestation of how I’m feeling about this assignment.
  + Going back to Major C still sounds discordant and just terrible
  + Tried turning Segment 1 into one continuous stream of sound and it turns out that my data points are so similar it rounds into the same 3 notes over and over again
  + Talked to a friend complaining about how awful everything sounds, she suggested I try and scrub out the dissonant notes. I think it might remove too much of the data, but she also sent me some links to tuning and score creation programs. The one I opted to try was ScoreCloud.
  + Saved the midi file from the three separate voices even though it’s terrible because what else am I gonna do anyway
* ScoreCloud
  + Download ScoreCloud, create an account to use the software
  + Load midi file into the thing, and it turns it into sheet music! I played piano for 11 years and this is much easier for me to digest than just a pure audio file
  + It still sounds terrible
  + Figured out if I move into the Voices/Mixer I can temporarily take out the second and third voices so I can edit them one at a time
* ScoreCloud – Segment 1 Part 1
  + It sounds less bad in Violin. Still bad, but less bad. I can probably work with this.
  + Turns out some of the note values are so high they are unplayable by a violin. The audio just cuts out when it gets to those notes and cuts back in when the notes because plausible again
  + I think the main issue is that everything got pushed to the extremes of the keyboard because the numerical values were so far apart. The first three bars and an extra beat are marked a full octave below the normal bass clef, and it’s still below the normal staff lines. I pulled these notes up an octave and it sounds nicer
  + I pull the next measure and a half (or so) down an octave, and the next two and a half (or so) measures up, adjusting the clef as I go
  + Deleted the empty last measure
  + Lengthened the last sixteenth note to a quarter note so the piece doesn’t cut off as abruptly
  + It sounds better! Less like someone transposed a kid keybashing a piano for violin
  + It sounds really choppy because there are a lot of consecutive repeated notes, so instead I’m going to go through and turn those into sustained notes for the same duration of time (ex: four consecutive sixteenth note Cs become a quarter note C
    - Edited the first measure and then played it to see if it made things more interesting, the music flow better and sound less choppy and I think it did! So I’m going to do the same for the rest of the part
    - I decided to not leave any repeated notes at all, even if it meant playing through the end of a beat and into another, and I also tied notes together over bar lines
  + It sounds a lot better. Still weird, but even more like music and less like clanging than before. I chose to bring the treble section right at the beginning down another octave so it wasn’t so incredibly high.
  + Saving it uploads it to the website – I can’t save locally unless I get a PRO account, which I will not be doing.
* ScoreCloud – Segment 1 Part 2
  + Went back to the Voices/Mixer and disabled Part 1 and enabled Part 2
  + Part 2 is a lot more repetitive looking than Part 1
  + Same process – pulling notes towards the centre of the keyboard by octaves so the note being played is the same just at a more reasonable octave
  + Because this track seems a lot more beat-like than the first track and it has a lot more repeated notes, I will start each beat of a measure with a new note. Not sure how best to explain it so I will use screenshots. I’m not sure if it’ll make much sense to someone who doesn’t read sheet music or know note values.
    - Original looks like this:



* + - If I used the same note combining method as Part 1, it would look like this:



* + - But instead to keep more of a beat I’m opting to do this instead:



* + - Complete that for the rest of Part 2
  + Part 2 goes a lot faster
* ScoreCloud – Playing Segment 1 Parts 1 + 2 together
  + Switched Part 1 back to piano – I can play around with instrumentation later
  + Played both segments at once. It sounds pretty nice now. Still weird, but much more like music.
* ScoreCloud – Segment 1 Part 3
  + Switched Part 1 + 2 off and Part 3 on
  + Pulled notes towards centre of keyboard again
  + To break up some of the very long notes in the first and second parts I’m going to have new notes on every half beat, allowing for repeated notes
* ScoreCloud – Segment 1 All Together Now
  + Reenabled Parts 1 and 2
  + Hey I made music!
  + Made the decision to pull the first few bars of Part 3 in bass clef up two octaves so it’s in the treble clef so the beginning isn’t all low and create more of a variety in sound.
  + Thought it’d be more interesting with different instruments so I set Part 3 to Violin and Part 2 to cello
  + Sounds pretty good, but I’m not sure if it’s Stockholm Syndrome or if it actually sounds alright.
* Segment 2
  + Used the same processes as Segment 1 to move data from the excel spreadsheet into Music Algorithms
  + Downloaded the midi file and loaded it into ScoreCloud
    - Multiplied the decimals by 100, rounded the number values, set the scale at Major C
  + Realize once the score populates, for some reason it’s noted in G major (with an F#) rather than C Major, which has no sharps? Not sure why or how this happened, and I’m not convinced it’s something that matters/I can do anything about. Moving on
  + Isolate Part 1, delete the extraneous empty measure
  + Part 1
    - I like the way the differences in high and low pitches sound so I’m not changing the octaves for this part
    - I am going to lengthen notes if they’re repeated the way I did in Segment 1 Part 1, with no regard for where the beats in the measure sit
    - Lengthened last note to the end of beat 3 of the last measure
  + Part 2
    - Turn off Part 1 and turn on Part 2
    - A lot more extreme notes so I’m going to fiddle with the octaves first
    - This set of data also has a lot of note changes so I’m also going to disregard where the beats are when I merge repeated notes
    - Lengthened last note to the end of beat 3 of the last measure
  + Part 3
    - Turn off Part 2 and turn on Part 3
    - Also has lots of extreme notes so octave fiddling first. Also seems much more beat like so I will start each beat with a new note the way I did Segment 1 Part 2
  + Sounds okay, saved and uploaded