JanCarlo Bustamante Professor Long MAT 115-002 2 May 2022

Logo Assignment

For my logo, I decided to combine two concepts into one. Mobius bands and the Fibonacci sequence are used in my logo. I chose the Mobius band because that video of Vi Hart and Professor Long's demonstration stood out to me. I also chose the Fibonacci sequence because this summer, I worked with Owen County High School's marching band and their show was titled Phi.

The first thing I needed was to make a Mobius band out of some staff paper, this was quite easy to do, I just printed it out and glued two sides together then gave it a twist together! Writing on it was pretty easy since I could just pull it along and as I wrote the notes down. It was kind of a relief once I made it to the end and saw the first note I wrote getting closer and closer.

The second concept is the Fibonacci numbers and this was the hardest part to turn into music. I used this:

1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, 1597, 2584, 4181, 6765, 10946, 17711, 28657, 46368, 75025, 121393, 196418, and 317811.

I then used those numbers as intervals and converted those intervals into pitches in C major. 1 = C, 2 = D, 3 = E, 4 = F, 5 = G, 6 = A, 7 = B. C Would show up at 1, 8, 15, 22, 29... The pitches for this section of the sequence are: C, C, D, E, G, A, B, A, A, G, F, D, A, C, B, C, B, G, B, G, B, G, F, G, B, G, B. I noticed a lot of G's and B's which in C major outlines a dominant dyad which makes a strong tonal emphasis to C! The last note in this sequence also perfectly makes a leading tone to the tonic so it can keep going forever since there is never a perfect cadence back in the tonic, you will always hear a leading tone that resolves back to the beginning of the Morbius band.

