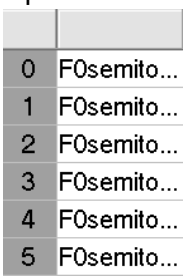
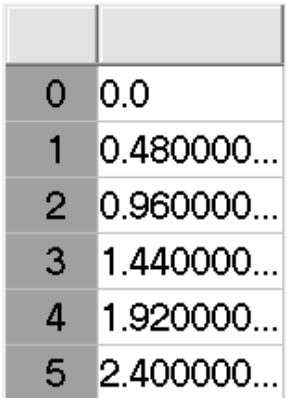
README - Deconstructing OpenSmile H5 Files

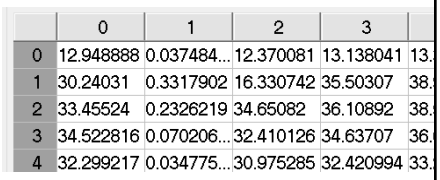
I. **Goal**
   A. This document contains information relevant to accessing and understanding the H5 files containing OpenSmile analysis information.

II. **Accessing**
   A. Using HDFView: Download HDFView from the HDFGroup. Then, open the H5 file from inside the interface.
   B. Use the h5py library.

III. **File Structure**
   A. Spotify-Podcasts/EN/opensmile/{letter}/{letter} contains an H5 file per podcast episode. Each H5 file per podcast episode contains one group, entitled functionals, and four members: axis0, axis1, block0_items, and block0_values.
   B. Spotify-Podcasts/EN/opensmile/podcasts-audio-summarization-testset contains a summary H5 file for some episodes from 2021. The files in this directory are structured the same as the other files.

H5 File Structure Summary:

Member	Dimensions	Description	Sample data
axis0	88 x 1	Column vector containing only the podcast audio features names.	loudness_sma3_amean, loudness_sma3_stddevNorm, equivalentSoundLevel_dBp 
axis1	(Length of podcast in seconds)/(0.48) x 1	Column vector containing a range from 0.0 to the number of seconds in the podcast, separated by 0.48 second intervals. For example, a 56.17 minute podcast would 7034 elements, ranging from 0.0 to 3376.32.	0.0, 0.48, 0.96… 
block0_ite	Same as axis0		

ms			
block0_values	88 x nrow(axis1)	Table where each column represents a feature from axis0, and each row represents a .48 second interval of the podcast. For example, row 0 represents the feature values taken during the 0.0 to 0.48 second interval. Row 2 represents the feature values taken during the 0.48 to 0.96 intervals, and so on.	

	0	1	2	3	
0	12.948888	0.037484...	12.370081	13.138041	13.
1	30.24031	0.3317902	16.330742	35.50307	38.
2	33.45524	0.2326219	34.65082	36.10892	38.
3	34.522816	0.070206...	32.410126	34.63707	36.
4	32.299217	0.034775...	30.975285	32.420994	33.