# Readme

# Just unzip the hw file. Directory structure should be as follows:

# Parent directory -

# 

# Inside the parent directory we have jythonMusic directory, the folder marked in yellow will be generated automatically.

# jythonMusic directory –

# 

# Program Execution

# Minimal Performance:

# Sonify temperature data –

# Execute file SHANTANU\_temperatureMusic.py in the JEM editor

# Execute file temperaturePlot.py to get the line plot, output is as below:

# 

# Have plotted data only of first four years, but we can see the pattern (mountains-valleys) in the plot, same is evident in the music as well, high pitched notes followed by low pitched followed again by high pitched notes.

# Sonify grayscale image –

# Execute file SHANTANU\_grayScaleSonify.py in the JEM editor

# Satisfactory, Baseline and Good Performance:

# Execute file readabilityTestAgent.py and just follow the CLI

# Below is the output for Flesch Book Readability score:

# 

# Selecting appropriate options for category, sub category and book

# Result will be as follows:

# 

# Evaluate at least 2 books for the plotting functionality to work.

# Press ‘p’ for plot to appear, result will be as follows:

# 

# Press 0 anytime to go back to the previous menu.

# For Natural Language Entity Relationship extraction from one of the books, select option 2.

# 

# Select 1 to view heatmap between person verb person, as below:

# 

# Select 2 to view scatterplot between people and locations, as below:

# 

# Select 3 to search and location download images as below:

# 

# Now, in the jythonMusic folder open SHANTANU\_searchsonify.py. This will play the sound from the corresponding location sentence and display an image as follows:

# 

# Output image shown as below:

# 

# Website created using genetic algorithm:

# Follow the command line interface to select the appropriate options, you will have to select the webpages you liked in each generation.

# 

# Below are 2 samples of webpages created(kindly zoom in to view the complete image ):

# 