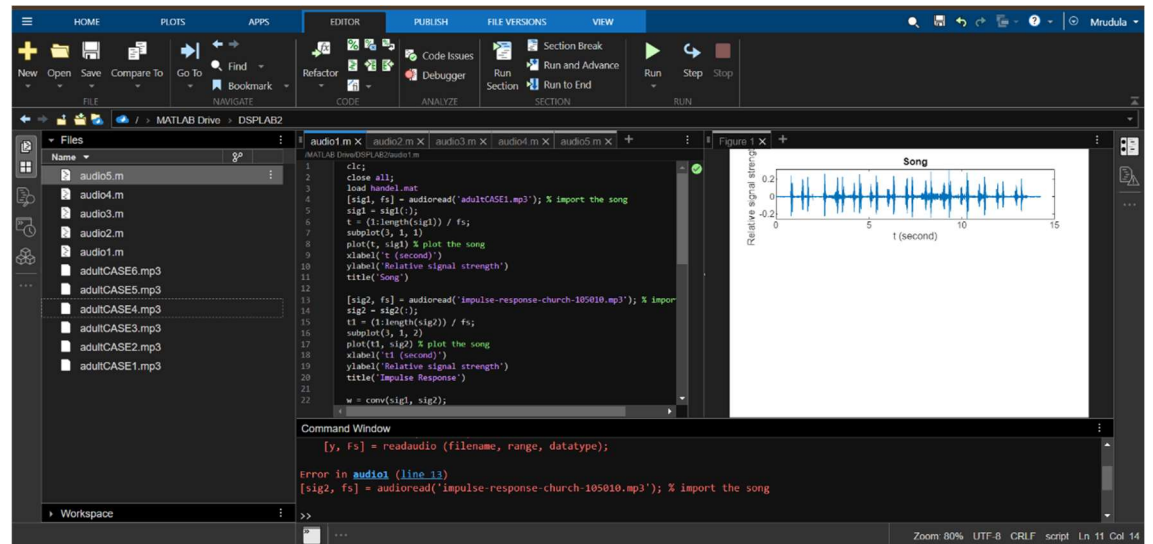


Semester	T.E. Semester V– Biomedical Engineering
Subject	Digital Signal Processing
Subject Professor In-charge	Prof. Geetha Narayanan
Laboratory	GE Lab/Online

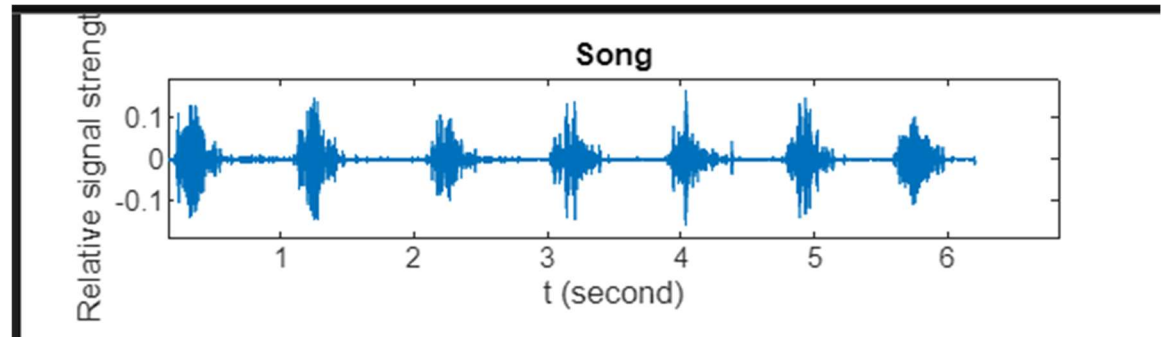
Student Name	Mrudula Wani
Roll Number	22105A0031
Grade and Subject Teacher's Signature	

Experiment Number	4
Experiment Title	Record your voice. Convolve the voice in wav format with any signal/disturbance/Music. Analyze the effect. Try again with some necessary filtering. Plot the waves
Resources / Apparatus Required	Hardware: IBM PC Compatible Computer System
	Software: Matlab Online
Objectives (Skill Set / Knowledge Tested / Imparted)	<ol style="list-style-type: none"> 1. Reading audiofile in matlab 2. Convolution of audiofile
Theory of Operation	To learn about convolution of real signal
Program:	<p>MP3 versions of accurate live recordings of normal and abnormal heart sounds teach auscultation skill and the relation of heart sounds to common cardiac diagnoses.</p> <ul style="list-style-type: none"> • Adult Case 1 - Normal sounds • Adult Case 2 - Innocent or functional murmur • Adult Case 3 - Mitral valve stenosis (includes 4 extra recordings that have the same diagnoses) • Adult Case 4 - Bicuspid aortic valve with aortic stenosis and insufficiency (includes 3 extra recordings that have the same diagnoses) • Adult Case 5 - Ventricular septal defect

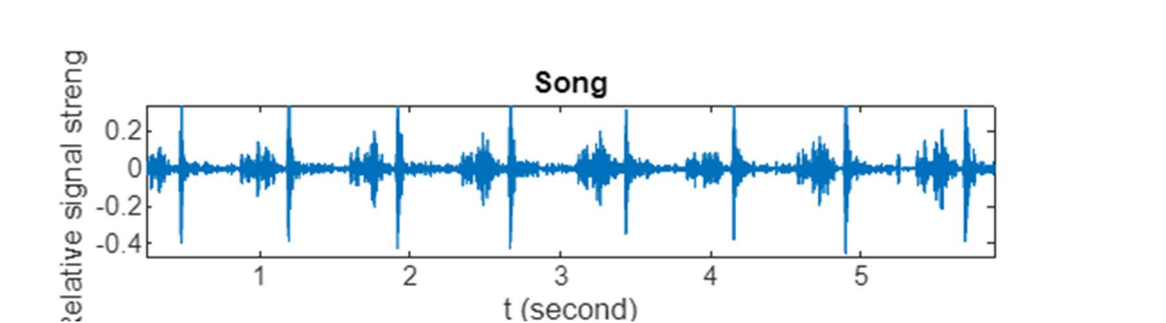


Outputs

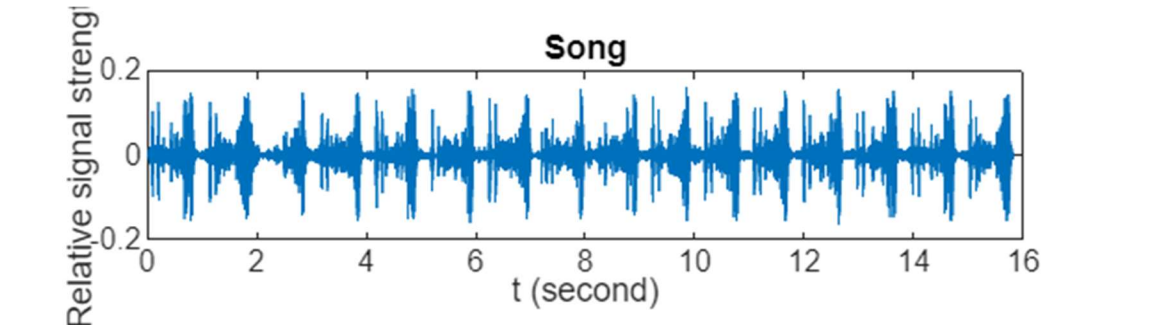
CASE 1 :



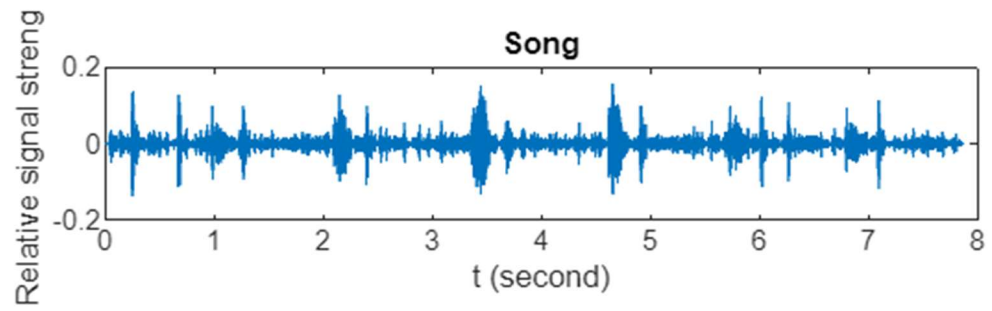
CASE 2 :



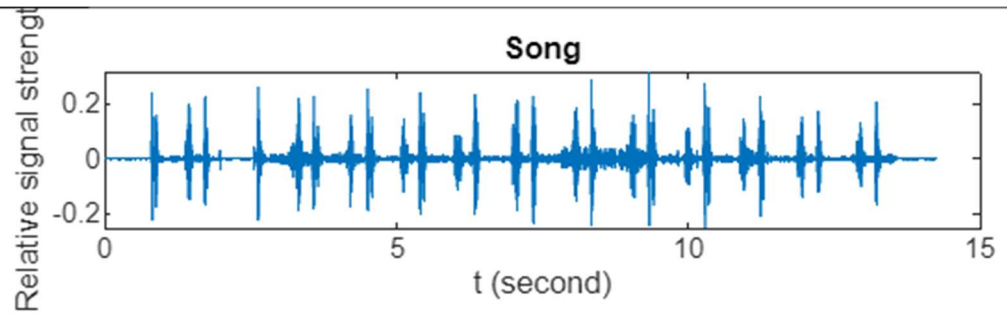
CASE 3 :



CASE 4 :



CASE 5 :



References

<https://teachingheartauscultation.com/heart-sounds-mp3-downloads>