

LabWork #2

MAT 116E-Advanced Scientific and Engineering Computing (MATLAB)

Instructor: Dr. Ali DEMİRCİ

Teaching Assistant: Gökhan GÖKSU, Göksu ORUÇ, Alperen KARAN Recitation Date: 05/10/2018

Main Task (Star Wars Imperial March)

In this task, you are asked to play Star Wars Imperial March with the `soundsc` function of MATLAB! The notes are presented in Figure 2). You are also free to select any other track by a quick search on Google!

First, generate the notes that you need by using sine functions

$$f_{\omega}(t) = \sin(2\pi\omega t),$$

and the frequencies (ω values) in Table 1. Here you can generate a quarter note by using 8000 equally spaced points on the interval $0 \leq t \leq 1$. You may use any octave as you want.

SES FREKANSLARININ HERTZ CİNSİNDEN DEĞERLERİ								
	Oktav 0	Oktav 1	Oktav 2	Oktav 3	Oktav 4	Oktav 5	Oktav 6	Oktav 7
DO	16,35	32,7	65,4	130,8	261,6	523,2	1046,4	2062,8
DO DİYEZ	17,32	34,64	69,28	138,56	277,12	554,24	1108,5	2217
RE	18,35	36,7	73,4	146,8	293,6	587,2	1174,4	2378,8
RE DİYEZ	19,45	38,9	77,8	115,6	311,2	622,4	1244,8	2489,6
Mİ	20,6	41,2	82,4	164,8	329,6	659,2	1318,4	2636,8
FA	21,83	43,66	87,32	174,64	349,28	698,56	1397,1	2794,2
FA DİYEZ	23,12	46,24	92,48	184,96	369,92	739,84	1479,7	2949,4
SOL	24,5	49	98	196	392	784	1568	3136
SOL DİYEZ	25,96	51,92	103,84	207,68	415,36	830,72	1661,4	3322,9
LA	27,5	55	110	220	440	880	1760	3520
LA DİYEZ	29,14	58,28	116,56	233,12	466,24	932,48	1865	3729,9
Sİ	30,87	61,74	123,48	246,96	493,92	987,84	1975,7	3951,4

Figure 1: Frequency Values of Notes.



Figure 2: Star Wars Imperial March Notes.

Submission Information

Any LabWork submitted after class will be subject to a 20-point deduction per 24 hour period. Extensions should be requested at least 3 days in advance and will only be granted for exceptional reasons (e.g., conference submission). You may work with your friends. Collaboration is strongly recommended. However, each student should be able to present his/her program.

