DSP Projects of Chapter 41. Download an audio signal file with a sampling rate of 16 KHz from the course Web site and process the signal as follows. a. Change the sampling rate to 12 KHz for the audio signal.

Please upload your program and the results to the ftp site within two weeks after the date of project assignment. The audio signal files can be downloaded from the website. The ftp site can be found at the course website.

Ans:

CODE:

clear all; close all; clc;

filename = 'singing16k16bit-clean.wav'; %檔案名稱

outputname = 'result.wav';%輸出名稱

outputfs = 12000;%要更改成的fs

[y, fs] = audioread('singing16k16bit-clean.wav');%讀檔

time = (1:length(y)) / fs;

result = resample(y, outputfs, fs) ;%resample

audiowrite(outputname, y, fs);

* Result

1.輸出音檔 result.wav