

Digital signal processing

Practical tasks

Task 1:

Install Matlab2020 and activate it.

Task 2:

Construct 3D matrix

Task 3:

Find an easy way to build a 7×8 -matrix whose other entries are zeros, but in its diagonal and its last column are 5s

Task 4:

Sheet1

Task 5:

Plot any random signal and apply operation (shift-scale-inverse) on it.

Task 6:

Sheet 2

Task 7:

Apply echo effect on an audio file using convolution.

Task 8:

Apply echo effect on an audio file without convolution.

Activity Lab 6:

Apply Fourier transformation on a signal consisted of 3 sinusoidal signals.

Projects:

1- Follow the project policy:

- i. Max number of members is five.
- ii. Choose your team leader to represent yours

2- Self-study: GUI under Matlab.

Project task 1:

Apply echo effect on an audio file (GUI).