**REPORT**

Zajęcia: Analog and digital electronic circuits

Teacher: prof. dr hab. Vasyl Martsenyuk

**Lab 3 and 4**

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**Topic:** Windowing

**Variant 15**

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# 1. Problem statement:

Creation of tree sine signals with specified fl, f2 and f3 frequencies. Maximum amplitude |x[k]|max, using a sampling frequency fs over the range

0 <= k < N

Two visualizations:

* DFT (Discrete Fourier Transform)
* DTFT (Discrete-Time Fourier fransform)

# 2. Input data:

* fl**=** 500
* f2 **=** 500.25
* f3 **=** 499.75
* |x[k]|max **=** 4
* fs **=** 800
* N **=** 2000

# 3. Commands used (or GUI):

## a) source code

## b) screenshots

## c) Link to remote repozytorium

<https://github.com/TobiaszWojnar/DSP>

# 4. Outcomes:

Results from console, screenshots etc.

# 5. Conclusions

For the reasons given, we conclude that ????????????