

COMP.SGN.100 Introduction to Signal Processing, Exercise 2, 8.-10.9.2021

This time we have only Matlab tasks, which are done during the exercise session. (Starting from Exercise 3, we will also have Pen & paper tasks, which should be done and submitted to Moodle before the exercise session.)

Exercises and pages below refer to B. Hahn, D. Valentine: Essential Matlab for Engineers and Scientists (5th Edition), <http://www.sciencedirect.com/science/book/9780123943989> (at Tampere University network). Ebooks can also be accessed by logging in to andor.tuni.fi/ of the university library services. Direct link to the book there: https://andor.tuni.fi/permalink/358FIN_TAMPO/176jdvt/cdi_askewsholts_vlebooks_9780123946133

Task 1. (Matlab) Exercise 2.26 on page 81. Use function `disp` to print the values to console; e.g.,

```
x =10;  
disp(['The value of x is ', num2str(x)])
```

Task 2. (Matlab) Write a function `fahrenheit_to_celcius(x)` to convert a Fahrenheit temperature to Celcius. Study the MathWorks website on how to define functions: <http://se.mathworks.com/help/matlab/ref/function.html>. Also find the conversion formula on your own.

Task 3. (Matlab) Plot the cosine function on the interval $[0, 2\pi]$.

Task 4. (Matlab) Exercise 9.1 on page 232.

Task 5. (Matlab) Exercise 9.3 on pages 233-234. Hint:

<http://se.mathworks.com/help/matlab/ref/polarplot.html>.