COMP.SGN.100 Introduction to Signal Processing,
Exercise 1, Fall 2020

This time we have only Matlab tasks. Starting from Exercise 2, we will also have Pen & paper tasks.
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)

Task 1. (*Matlab*) Exercises 2.1-2.8 on pages 36-37.

Task 2. (*Matlab*) Exercises 2.1 and 2.2 on page 52.

Task 3. (*Matlab*) Exercises on page 64 and on page 66.

Task 4. (*Matlab*) Exercises 2.1 and 2.2 on pages 76-77.

Task 5. (*Matlab*) Exercise 2.20 on page 79.

Task 6. (*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 7. (*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 8. (*Matlab*) Plot the cosine function on the interval $[0, 2\pi]$.

Task 9. (*Matlab*) Exercise 9.1 on page 232.

Task 10. (*Matlab*) Exercise 9.3 on pages 233-234. *Hint:* `http://se.mathworks.com/help/matlab/ref/polarplot.html`.