

## Matlab hands-on 2

Make the Matlab program as instructed below.

1. Make a 1D array  $u$  by using array  $v$  as follows.

$$v = [3 \quad 5 \quad -2 \quad 5 \quad -1 \quad 0]$$

1) If a value in  $v$  is great than 0, move it to  $u$  at the same location. Otherwise, change the value to 0. You MUST use `find()` function, e.g.  $v = [5 \ 4 \ -3]$   $\Rightarrow$   $u = [5 \ 4 \ 0]$ .

2) Using `if` and `for` (not using `find()` at this time), do the same thing as described in 1).

2. Make a program that accepts an input filename, change its extension of the filename and displays it as the example below. (hint: Use `find()` to get the index of '.')

e.g.) input file name: gate.in  $\rightarrow$  output file name: gate.out

3. Using `for` statement, make a program to get an answer of the equation below.

$$\sum_{i=3}^{10} 2^i$$

4. Without using `for` statement, make a program to get an answer of the equation above.