

Course Name: Information and Communication Technologies Lab Code: CEN1005

LAB #1: Introduction to MATLAB and Octave: Command Line

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Objectives:

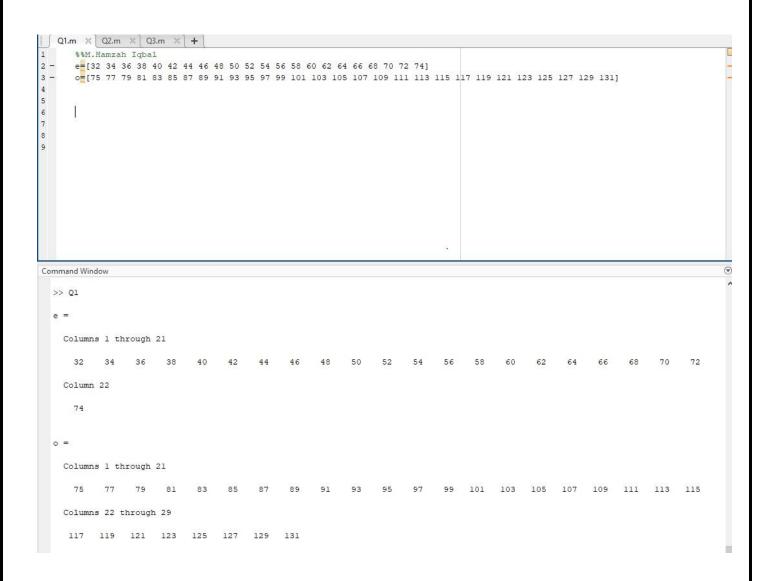
- To have basic understanding to work in MATLAB environment.
- To implement some basic commands and functions in MATLAB.
- To have basic understanding to Octave: Command line.

Lab Tasks:

Question 1

Create a vector

- a. 'A' of even whole numbers between 31 and 75.
- b. 'B' of odd whole numbers between 74 and 131.



Question 2

Let x = [2 5 1 6];

- a. `Add 16 to each element
- b. Add 3 to the odd indexed element.
- c. Compute the square root of each element.
- d. Compute the square of each element.



Question 3

Let $x = [3 \ 2 \ 6 \ 8]$ and $y = [4 \ 1 \ 3 \ 5]$

- a. Add the sum of the elements of x to y
- b. Raise each element of x to the power specified by the corresponding element of y.
- c. Multiply each element in x by the corresponding element in y and store the result in 'z'.
- **d.** Evaluate x*y' and interpret the result: The interpretation of this is that the row has been converted to a column which is also know as transpose of a matrix.

```
■ Q3.m × +
 /MATLAB Drive/Q3.m
            %%M.Hamzah Iqbal
            x=[3 2 6 8]
            y<u>=</u>[4 1 3 5]
  3
            s1=[3+2+6+8];
  4
            a=s1+y
            b=[3.^4 2.^1 6.^3 8.^5]
  6
            z<sub>≂</sub>x.*y
  8
            d=(x.*y)'
  9
 10
Command Window
>> Q3
                    6
a =
    23
            20
                   22
                          24
b =
           81
                         2
                                    216
                                               32768
                 18
    12
                        40
    12
     2
    18
    40
```

	learned how MATLA atrices. Then we perform			equations and how we nm, square root,
multiplication	and addition of matri MATLAB.MATLA	ces. We are now a	ble compute differ	rent calculations on ers to solve mathematical