

**Introduction to Programming**  
**Tirgul 3 – Flow control**

Write a script called **practice\_if.m** and in it do the following:

- Define 2 variables (scalars) with random numbers between -10 and 10.
- Create a new variable that will have a value of:
  - 1 if both variables are larger than 2.
  - -1 if both variables are smaller than -2.
  - 10 if one variable is larger than 2 and the other is smaller than -2.
  - 0 in any other case (what are all the possible cases?).
  - Run the script several times.

Write a script called “**practice\_for.m**” that does the following (use “for” loops):

1. Create a 1x40 vector containing random numbers between 2-15 (don't use “for” to do this).  
Calculate the sum of all elements in the vector (use “for”).
2. Create a 20x20 matrix of random integers (round numbers) between 0-10.  
Use "for" loops to calculate the total sum of all elements in the matrix.