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"""#-----#"""
"""#-----METU Cognitive Sciences-----#"""
"""#-----Symbols & Programming-----#"""
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"""#-----#"""

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"""-----"""
"""-----Exercise 1.1-----"""
"""-----"""

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; Define a procedure that takes two numbers and returns their average.

```
(defun avg (x y) (/ (+ x y) 2))
```

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"""-----"""
"""-----Exercise 1.2-----"""
"""-----"""

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; Define a procedure that takes two numbers and returns the number obtained by dividing their product by their average. For the inputs 3 and 4, your program must return 12/3.5. In your solution, use the procedure you defined for Exercise 1.1.

```
(defun func1 (x y) (/ (* x y) (avg x y) ) )
```

```

"""-----"""
"""-----Exercise 1.3-----"""
"""-----"""

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; Define a function that takes three arguments x, y and n, and returns the result of the following function:

; $A \times B = (A_1 / A_2) \times (B_1 / B_2) = (A_1 / (a_2 / a_3)) \times ((b_1 + b_2) / (B_2))$

```
(defun func2 (x y n) (* (/ (expt x n) (- 7 (/ y 2)) ) (/ (+ (expt y (/ 2 3)) 17) 4)))
```

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"""-----"""
"""-----Exercise 1.4-----"""
"""-----"""

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; In order to convert a temperature in Fahrenheit into Celsius, you need to subtract 32 from it and multiply the result by 5/9. Define a procedure that converts from degrees Fahrenheit to degrees Celsius.

```
(defun convertFtoC (f) (* (/ 5 9) (- f 32)))
```