

# BEE 4750/5750 Homework 0

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## Problem 1

### Problem 1.1

```
julia> function square_number(x)
    output = x*x
    return output
end
square_number (generic function with 1 method)
```

### Problem 1.2

The function says that  $5^2 = 25$

### Problem 1.3

```
julia> using Plots

julia> x= LinRange(-10,10,100)
100-element LinRange{Float64}:
 -10.0, -9.79798, -9.59596, -9.39394, ..., 9.19192, 9.39394, 9.59596, 9.79798, 10.0

julia> plot(x, square_number(x)) # problem: trying to pass a vector to square_number
Error: MethodError: no method matching *(::LinRange{Float64}, ::LinRange{Float64})
Closest candidates are:
  *(::Any, ::Any, !Matched::Any, !Matched::Any...) at operators.jl:560
  *(!Matched::LinearAlgebra.UniformScaling, ::AbstractVecOrMat{T} where T) at /Users/j...
  *(!Matched::LinearAlgebra.Transpose{var"#s814", var"#s813"} where {var"#s814", var"#s813"} where {var"#s814", var"#s813"} at ...
```

## **Problem 2**

**Problem 2.1**

**Problem 2.2**

## **Problem 3**

**Problem 3.1**

**Problem 3.2**

**Problem 3.3**

**Problem 3.4**

## **Problem 4**

**Problem 4.1**

**Problem 4.2**

**Problem 4.3**

## **References**