MATH 371-03 (181)
MATLAB # 1
Due Oct. 4, 2018

We would like to compare the performance of two root finding methods: Bisection method and fixed-point iteration.
Write a MATLAB code to test these two methods on the following function:

$f(x) = x - 3^{-x}$ on the interval $[0, 1]$

using TOL $= 10^{-}5$ and the same stopping procedure for both methods.

Arrange your output in a table. What is your observation?

MATLAB hints:
You may use the following to define your function:
$f = @(x)\ \ (x)^2 - 2 * (x)$
this define, for example, the function $f(x) = x^2 - 2x$ then you may use $f(2)$ to evaluate your function at $x = 2$. Try to define other functions.