Write a FUNCTION called myGAUSS to implement a Gaussian function. Given argument x, compute \( y = g(x) \) as described in https://en.wikipedia.org/wiki/Gaussian_function.

The Gaussian function is given by

\[
g(x) = \frac{1}{\sigma \sqrt{2\pi}} e^{-\frac{1}{2}((x-\mu)/\sigma)^2}
\]

where \( \mu \) is the mean and \( \sigma \) is the standard deviation of the Gaussian Probability Distribution Function.

For simplicity let us denote the mean and the standard deviation by \( u \) and \( s \), respectively, so that we would not have to deal with Greek characters. Everything else is pretty straightforward. The only thing to be mindful about is making sure that the function can handle matrix x inputs with element-by-element multiplication((x-u).^2).

```matlab
function [y] = myGAUSS(x, u, s)
    % myGAUSS
    % Given the x-value, myGAUSS returns a height, the y-value based on the
    % the Gaussian Probability Distribution function (PDF) with mean u and
    % standard deviation s.
    % Usage: function [y] = myGAUSS(x, u, s)
    % Where:
    % INPUTS
    % x = The point along the x-axis
    % u = The mean of the Gaussian PDF
    % s = The standard deviation of the Gaussian PDF
    % OUTPUT
    % y = The height of the function at x
    % Created By: September 12, 2019
    y = (s*sqrt(2*pi))^-1*exp((-2*s^2)^(-1)*(x-u).^2);
end
```