```matlab
function fixedPointIterationA()
% Use the following fixed-point iteration method to compute 21^(1/3)
% pn = (20pn-1 + 21/(pn-1)^2)/21

% how many iterations it takes to compute 21^(1/3) using this method
how_many_iterations = 0;

% pn-1
p_last = 0;

% pn
p_current = 1;

% tolerance
TOL = 10^(-10);

% Until the error range is less than tolerance,
% we continue to apply this fixed-point iteration method.
while abs(p_current - p_last) >= TOL

    % set pn-1 to the last value of pn
    p_last = p_current;

    % calculate pn using the fixed-point iteration method
    p_current = (20*p_last + 21/(p_last^2))/21;

    % increment how_many_iterations
    how_many_iterations = how_many_iterations + 1;

end

% print the results
fprintf("n: %d\t", how_many_iterations);
fprintf("p%d: %.10f\t", how_many_iterations, p_current);
fprintf("|error|: %.10f\n", TOL);

end
```

n: 135 p135: 2.7589241758 |error|: 0.0000000001

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