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Command window

```
clear
clc
syms x
format short g
f = exp(-0.5 * x) * x^2 - 2;
f_prime = diff(f, x);
x = 0.5;
for i = 1:10;
    if (f(x) > 1);
        x(x) = x;
        x = double (x + (x - (f(f_prime))));
        x(x) = x;
    end
    eq(x) = abs((x(x) - x(i)) / x(x)) * 100;
    if eq(x) <= 1e-21;
        break
    end
end
end
```

Table 1 = fplot('eq', 'x', 'eq')

Table 1. properties. Variable names = ['iteration number', 'values of x', 'errors']

OUTPUT

Table 1

	iter	Values of x	Error
	0	0.5	0
	1	0.83889	40.307
	2	0.88992	5.2059
	3	0.88571	0.084972
	4	0.88571	2.2247e-0.5
	5	0.88571	1.5293e-12
	6	0.88571	0