

```
clc; clear all; hold on; grid on;

h = 0.01;
t = 0:h:5;

i = zeros (1,length(t));
i(1) = 1;

R = 2;
L = 1;
i_ref = 5;
u = R*i_ref;

f = @(I) (1/L)*(u - R*I);

for j = 1:(length(t) - 1)

    k_1 = f(i(j));
    k_2 = f(i(j) + h*0.5*k_1);
    k_3 = f(i(j) + h*0.5*k_2);
    k_4 = f(i(j) + h*k_3);

    i(j+1) = i(j) + h*((1/6)*k_1 + (1/3)*k_2 + (1/3)*k_3 + (1/6)*k_4);

end

plot(t,i);
```