```matlab
%Assignment 4, Question 2
%Coded by: Nicholas Paul
%For: Dr. Martha Dagnew. CEE 2219b
%Feburary 11th 2019

c = 0.02;
Ta = 20;
iter = 1;
T(iter) = 50;

while i<51
    if(i>0)
        T(iter + 1) = T(iter) - c*(T(iter)-Ta)*2;
        iter = iter +1;
    end
end

plot(0:2:100,T);
xlabel('Time (min)');
ylabel('Temperature (degrees celsius)');
title('Temperature vs Time');
```

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