

* TUGAS 3

1) $\frac{dx(t)}{dt} = -2x(t)$, $x(0) = 10 \rightarrow \frac{dx(t)}{dt} = a x(t)$
 $a = -2$
 $t_a = 5$ $N = 10$ $\Delta t = \frac{5}{10} = 0,5$
toleransi = 0,01 %

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for I = 1:N
    - hitung x(I) order pertama  $\rightarrow x_I$ 
    - hitung x(I) order kedua  $\rightarrow x_{II}$ 
    - hitung estimasi error =  $\left| \frac{x_I - x_{II}}{x_{II}} \right| * 100\%$ 
    if estimasi error  $\leq$  toleransi
        record t(I) dan x(I)
        next I
    else
         $\Delta t \rightarrow \Delta t / 2$ 
end
endif
```

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for
    "break"
end
```