Test example

Consider following system of ODEs:

$$y_1' = 2t \cdot y_1 \cdot \ln(\max(y_2, 10^{-3})),$$

$$y_2' = -2t \cdot y_2 \cdot \ln(\max(y_1, 10^{-3})).$$

Known analytical solution for this problem is:

$$y_1(t) = \exp(\sin(t^2)),$$

$$y_2(t) = \exp(\cos(t^2)).$$

Integration interval is $[0.1, 4.1]$. As initial conditions we consider analytical solutions at t_1: $y_1(t_1)$ and $y_2(t_1)$.