In-class exercise 09

In this exercise, you need to solve the following initial value problem of:

$$\begin{cases} y' = x + y \\ y(0) = 1.0 \end{cases}$$

Use the spacing in x-direction as h=0.5, and find the solution at x=1.0.

x	y			
	Euler method	Backward Euler method	Heun's (Trapezoid) method	Midpoint method
0.0	1.0	1.0	1.0	1.0
0.5				
1.0				