$y' = e^x + \cos x + 2x, \quad y(0) = 0$

Integrate.

$$y = \int (e^x + \cos x + 2x)\,dx = e^x + \sin x + x^2 + C$$

Apply initial condition:

$$y(0) = e^0 + \sin 0 + 0^2 + C = 0$$

$$1 + C = 0$$

$$C = -1$$

So, $\boxed{y = e^x + \sin x + x^2 - 1}$