Experiment-3

Using Matlab code solve the following Differential equations

1.
$$\frac{d^{2}y}{dx^{2}} - 4\frac{dy}{dx} + 4y = \sin 2x, \quad y(0) = \frac{1}{8}, \quad y'(0) = 4.$$
2.
$$\frac{d^{2}y}{dx^{2}} + \frac{dy}{dx} - 6y = x, \quad y(0) = 0, \quad y'(0) = 1.$$

2.
$$\frac{d^2y}{dx^2} + \frac{dy}{dx} - 6y = x$$
, $y(0) = 0$, $y'(0) = 1$.