**【例8-37】** 解常微分方程。

syms x

diff\_equ='D2y+y=x\*cos(2\*x)';

y=dsolve(diff\_equ, 'x')

解得结果为：

y =

(1/2\*cos(x)+1/2\*x\*sin(x)+1/18\*cos(3\*x)+1/6\*x\*sin(3\*x))\*sin(x)+(-1/18\*sin(3\*x)+1/6\*x\*cos(3\*x)+1/2\*sin(x)-1/2\*x\*cos(x))\*cos(x)+C1\*sin(x)+C2\*cos(x)