```
Inhom = y''[x] - y'[x] - 2 * y[x] == Exp[x] / x^2;
hom = y''[x] - y'[x] - 2 * y[x] == 0;
Shom = DSolve[hom, y[x], x]

Shom = y[x] /. Shom[[1]]

y1 = Shom /. {C[1] → 1, C[2] → 0}
y2 = Shom /. {C[1] → 0, C[2] → 1}

Wronskiaan = Det[{{y1, y2}, {D[y1, x], D[y2, x]}}]

yp = -y1 * Integrate[y2 * (Exp[x] / x^2) / Wronskiaan, x] +
   y2 * Integrate[y1 * (Exp[x] / x^2) / Wronskiaan, x]

gensol1 = (Shom + yp) // Simplify

gensol2 = (y[x] /. (DSolve[Inhom, y[x], x])[[1]]) // Simplify

If[gensol1 == gensol2, Print["sol are equal"], Print["sol are not equal"]]
```