```
solution = DSolve[y'[t] == -3 t^2 y[t] + t^2, y[t], t]
```

$$\left\{\left\{y[t] \to \frac{1}{3} + e^{-t^3} c_1\right\}\right\}$$

```
f[t_] = y[t] /. solution[[1]]

F[t_] = Table[f[t] /. c1 → j, {j, -2.0, 4.0}]

Plot[{F[t]}, {t, -2.0, 3.0}]
```