Two words on second quantisation

Let $H = \frac{p^2}{2m} + U(q)$ be Hamiltonian of classic system. Consider corresponding Schrodinger equation

$$i\hbar\frac{\partial\Psi}{\partial t} = \hat{H}\Psi\,,$$

where $\hat{H} = \frac{\hat{p}^2}{2m} + U(q)\ \left(-\hbar^2\frac{\partial^2}{x^2}\right)$