What is the Schrödinger wave equation? Please give detailed answer

Schrödinger equation is an equation that describes system's changes with time. In the most general form it can be written as:

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

where Ψ is the wave function of the quantum system, i is the imaginary unit, $\hbar$ is the reduced Planck constant) and $\widehat{H}$ is the Hamiltonian operator.