$$u(t) \longrightarrow \boxed{G_{lp}(s) = \frac{100}{s^2 + 2s + 100}} \longrightarrow \boxed{G_{hp}(s) = \frac{s^2 - 0.001s}{s^2 + 200s + 10^6}} \longrightarrow y(t)$$