In this work, the dependence of Shafranov parameter on plasma internal inductance has been studied by using the solution of Grad–Shafranov equation (GSE) for Hefei Tokamak-7. The Shafranov parameter was obtained from the solution of GSE, using the expansion of free functions, which is quadratic in flux function. Then, we can find the dependence of Shafranov parameter on plasma internal inductance.