The Kepler and TESS satellites, in their search for exoplanets, provide highly accurate photometric data used to study stellar variability. This work analyzes the eclipsing binary star KIC 3858884, which exhibits pulsations. From Kepler data, the orbital period $P_{\rm orb} = 25.95185 \,\mathrm{d}$ is determined. Using the Phoebe program, the light curve is fitted, and the values of physical parameters along with their errors are identified. A pulsation analysis on the residuals of the fit is conducted using the Pyriod program, revealing the strongest period $P_{\rm puls} = 0.1383 \,\mathrm{d}$. A similar pulsation analysis is performed on TESS data without eclipses. Finally, the $P_{\rm orb} - P_{\rm puls}$ diagram is constructed.