The non-thermal emission in the magnetospheres of presupernova stars with initial dipole magnetic fields and a certain initial energy distribution of charged particles in a magnetosphere is considered. When the star magnetosphere compressing under the collapse, the magnetic field considerably increases. The field structure and particles dynamics in the magnetosphere can influence by three factors: particles pressure, collisions between they and star rotation. The analysis show that this factors may be neglected for the magnetosphere of the collapsing star. The conclusion follows from this result that the plasmas is frozen in magnetic field and collision-free. And so to investigate of particle dynamics in magnetosphere the method of adiabatic invariants may by used. The electric field in magnetosphere will accelerate the charged particles which generate radiation when moving in the magnetic field. The analysis of particle dynamics and its emission in the stellar magnetosphere under collapse show that the collapsing stars can by powerful sources of non-thermal radiation produced by the interaction of charged particles with the magnetic field. The radiation flux grows with decreasing stellar radius and frequency and can be observed in the form of radiation burst with duration equal to the stellar collapse time. The radiation flux depend on the distance to the star, its magnetic field, and the particles spectrum in the magnetosphere. The radiation flux is calculated for various collapsing stars with initial dipole magnetic fields and an initial power-series, relativistic Maxwell, and Boltzmann particles energy distribution in the magnetosphere. This radiation can be observed by means of modern astronomical instruments.