It is well known that solving the backward heat equation is challenging due to its severe ill-posedness and hence regularization is required. Hapuarachchi et al. considered the backward heat equation with a time-dependent variable coefficient and an approximation problem derived from the original equation by introducing a small perturbating parameter. They have used modified-quasi boundary value method to regularize the equation. We are currently working to obtain numerical results for various cases of this work. Classical numerical solutions (if exists) may not depend continuously on the boundary and final data since they cannot handle the severe ill-posedness and our current effort is to obtain numerical solutions to the approximation problem. (Received September 17, 2019)