Cephalometry gives great contribution in dentistry especially in orthodontics. Accuracy of cephalometry analysis is important to have right diagnosis and treatment plan. Several studies of computer technology have been done in order to support cephalometry analysis. The purpose of this study is to know the difference of accuracy between cephalometry analysis by manual and computerized (V-ceph). 30 samples of cephalogram are taken from Radiology Department of RSGMP PKG-UI, with criteria samples registered patient who has lateral sefalometri, both men and women who has a good condition of sefalogram which give a good and clear anatomical pictures that can be traced precisely. Each cephalogram was measured five times with one-day break by manual and computerized (V-ceph). Data is analysed using t-test. The conclusion shows that five variables have p>0.05 which means there are no significant differences between manual and computerized (V-ceph) measurements. However, those five variables of manual measurement have smaller score of standard error than computerized measurement. It shows that accuracy of manual measurement is better than computerized (V-ceph) measurement.