* Comp team -> navigation solution -> descripition
* We will use only pseudorange measurement on L1 frequency with the aim of GPSTK library
* Usage of ephemeris data (sat pos,vel, time) -> sat pos calculation?
* Parsing of Rinex file will give the ephemeris and observation data (PR vector, size depends on number of satellites)
* Green box written in .c or.cpp , around 300 lines of code can be expected
* Klobuchar model (Iono model) is also an input for the green box
* Output will be the position
* SimplePRSolution function of PRSolution.cpp can be used as a help for writing the algorithm
* x ,v,t, ? we have to know how long the signal travels in space . we have to consider the rotation of earth in the mean time. Called (Sagnac effect), can cause around 40 meter difference in position. It is one of the reasons of the iterative position solution
* rho: signal travelling time, satellite to receiver
* in ith iteration: ttr transmission time

1. calculate xvt(ttr) ith satellite pos, velocity, time data(clock, bias, drift), frame
2. sagnac correction
3. Consideration of error models (Iono, Tropo)
4. Creation of geometry matrix (A)
5. Creation of observation vector (y) : Model: Iono, Trop ,Clock;
6. Solve y = Ax for x

reporol letötelni a cuccokat

Eigen matematikai könytvár

build with cMakeList