

QA Report of satellite.py

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Code written by: Anant Joshi

QA performed by: Riya

Changes made:

- Removed dot and cross function because no need for row vectors.
- Instead of single quatMultipty declared two functions quatMultiplnorm and quatMultiplyUnnorm because when we want to rotate a vector by multiplying it with quaternion its magnitude should not change.
- In quatRotate
 - added a line which checks if a vector is null vector and if condition is true it simply returns the null vector.
 - replaced 2 lines of code (which were used for calculating inverse of quaternion) with quatInv().
- Corrected the error in sign in formula used in quatDer1.
- Removed quatDer2, skew and theta2J as not needed.
- In rotm2quat
 - changed convention of quaternion numbering from 1 to 4 to 0 to 3 because the latter convention is followed in quat2rotm and the book.
 - corrected the error in sign in formula used.
- In quat2rotm multiplied M1 with 2 and M2 with -1 so that it matches with the given formula.
- Added comments for better understanding of what a function is doing.