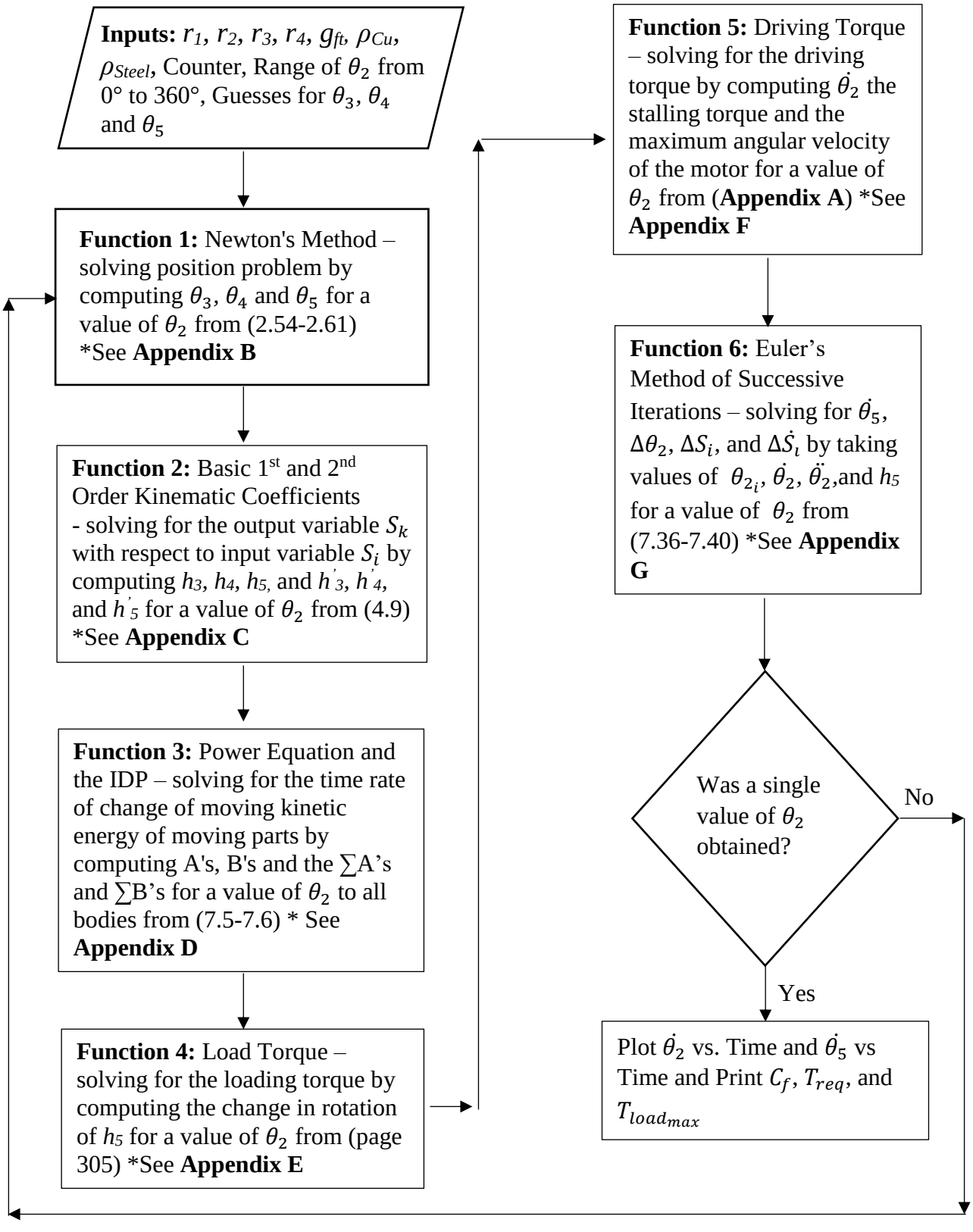
Inputs: r_1, r_2, r_3, r_4, g_{ft}, ρ_{Cu}, ρ_{Steel}, Counter, Range of θ_2 from 0° to 360°, Guesses for θ_3, θ_4 and θ_5
Function 1: Newton's Method – solving position problem by computing θ_3, θ_4 and θ_5 for a value of θ_2 from (2.54-2.61) *See **Appendix B**
Function 2: Basic 1st and 2nd Order Kinematic Coefficients - solving for the output variable S_k with respect to input variable S_i by computing h_3, h_4, h_5, and h'_3, h'_4, and h'_5 for a value of θ_2 from (4.9) *See **Appendix C**
Function 3: Power Equation and the IDP – solving for the time rate of change of moving kinetic energy of moving parts by computing A's, B's and the ∑A's and ∑B's for a value of θ_2 to all bodies from (7.5-7.6) * See **Appendix D**
Function 4: Load Torque – solving for the loading torque by computing the change in rotation of h_5 for a value of θ_2 from (page 305) *See **Appendix E**
Function 5: Driving Torque – solving for the driving torque by computing $\dot{\theta}_2$ the stalling torque and the maximum angular velocity of the motor for a value of θ_2 from (**Appendix A**) *See **Appendix F**
Function 6: Euler's Method of Successive Iterations – solving for $\dot{\theta}_5$, $\Delta\theta_2$, ΔS_i, and $\Delta\dot{S}_i$ by taking values of θ_{2_i}, $\dot{\theta}_2$, $\ddot{\theta}_2$,and h_5 for a value of θ_2 from (7.36-7.40) *See **Appendix G**
Was a single value of θ_2 obtained?
No
Yes
Plot $\dot{\theta}_2$ vs. Time and $\dot{\theta}_5$ vs Time and Print C_f, T_{req}, and $T_{load_{max}}$