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%Liam Hood Aero 215 Section 3 Homework 1
%Stand Atmosphere (1959) Model
close all;
clear all;
clc;

h = 90000; %h is sltitude in meters less than 100000
[ T , P , rho ] = stdatm_HOOD_LIAM( h ); %Calculates temperature,
    pressure, and density at any altitude below 100km
Td = [ 'The temperature at ' num2str(h) ' meters is '
    num2str(T(1)) ' K' ] ; %Adds context to temperature
disp ( Td )
Pd = [ 'The pressure at ' , num2str(h) , ' meters is ' ,
    num2str(P(1)) , ' kPa' ]; %Adds context to pressure
disp( Pd )
rhod = [ 'The density at ' , num2str(h) , ' meters is ' ,
    num2str(rho(1)) , ' kg/m^3' ]; %Adds context to density
disp ( rhod )

The temperature at 90000 meters is 165.66 K
The pressure at 90000 meters is 0.00010522 kPa
The density at 90000 meters is 2.2127e-06 kg/m^3
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