2023 PET328 Assignment 3

A Python script that implements the Sutton's Gas Gravity Correlation has been added to the class GitHub repository:
https://github.com/TTOWG/PET328_Class_2023/blob/main/demo_gas_grav_corr.py

Edit the script with a view to rework the conditional statement therein in such a way that the conditions are based on the *less than or equal to* Boolean operator.

You may access the Sutton algorithm here:
https://github.com/TTOWG/PET328_Class_2023/blob/main/algorithm_sutton_correlation.pdf

Save the upgraded script as *gas_grav_corr_upd.py*, commit and push it to your GitHub repository. Submit the URL to your copy of *PET328_Class_2023* repository.

You may test run your script with the following data:

Inputs

y_{CO2} = 0.0164

y_{N2} = 0.0236

y_{H2S} = 0.1841

Gas gravity = 0.6992

Outputs

Corrected gas gravity = 0.5604

Ppch = 682.3 psia.

Tpch = 341.8 deg Rankine

Ppc = 799.0 psia.

Tpc = 403.3 deg Rankine