



A.

B. Variable Names:

1. Mpa5 = list of lists of the property values of each temperature including Volume, internal energy, enthalpy, entropy
2. tempMin = the temperature to the left of the inputted value
3. tempMax = the temperature to the right of the inputted value
4. Input = the temperature that the user enters
5. Index = input / 20 to get the find out which index of the list the input is between
6. volume = interpolation of the temperature as the x values and the 2 volume values as the y values
7. energy = interpolation of the temperature as the x values and the 2 internal energy values as the y values
8. Enthalpy = interpolation of the temperature as the x values and the 2 enthalpy values as the y values
9. Entropy = interpolation of the temperature as the x values and the 2 entropy values as the y values

C. TEST CASES

1. 70
2. 150
3. 250
4. 65

5. 42.4
6. 100.123
7. 220
8. 100
9. -45
10. 360

G. Describing the difficulty with which your team was able to combine the code at the end. Did this provide your team any insight into how the design itself might have been specified more clearly?

The biggest challenge that happened when we tried to combine our code was how to fit each other's code together. It was difficult to integrate everyone's code into a cohesive program. When we gave out the individual segments of code we couldn't test if an individual piece of code would work because it was dependent on someone else's code. For example, when I, Ford, wrote the mp5 table and temp variable I couldn't test if the program would throw an error if I assigned -1 as temp because Noah was writing that function and I couldn't test my code without his.

Describing any benefits and drawbacks you saw into dividing the coding like this. Can you see reasons why this might be a good idea? Can you see reasons why this might be a bad idea?

The drawbacks of dividing the coding like this is that it requires good communication between teammates or else when you put code together and one part of the program throws an error it is very difficult to solve the problem when you have 2 different people trying to solve the problem a different way. On the other hand, dividing the work makes writing programs more efficient if you have good communication since having different ideas to solve the same problem can make the problem easier to solve.