

SOURCE CODE

Prompt-1

Create a physics simulation in html of container full of gas cylinder molecules. The molecules should be simple diatomic helium gas molecules. Also in addition to collision physics also add corrections for vanderwals forces and apply distortion to the molecules based on these forces.

Code:-

```
<!DOCTYPE html><html><head><meta charset="UTF-8">
<canvas id="c" width=800 height=600></canvas>
<script>
```

Prompt-2
Create a simple 2D demonstration of the above in java script to the level of complexity that you can code.

Prompt-3
Using the mass of the helium nucleus, and the speeds of the gas molecules; have label that outputs the temperature of the box at any instant. Use statistical mechanics to calculate the temperature.

Prompt-4
Use the above code to add the label in html below the gas container. To the right of the gas container have a small box that explains the kinetic theory of gases and have the relevant equation below it.