TOPIC
Thermodynamics

QUESTION
Air in a closed-rigid vessel at 2 bars and 25°C is heated until its temperature is 100°C. The final pressure in bars most nearly is
(A) 2.50
(B) 4.40
(C) 8.00
(D) 256.0

HINTS
- Closed means constant mass of air
- Rigid means constant volume
- Constant mass and constant volume mean constant specific volume
- Use absolute temperature
- For an ideal gas,
  \[ V = \frac{RT}{P} \]
- \( V_1 = V_2 \)

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