$$\boxed{\frac{V}{T} = \text{constant}}$$

3. **Isochoric Process**: $V = \text{constant}$

For ideal gas $PV = \mu RT$

$$\frac{P}{T} = \frac{\mu R}{V} \rightarrow \text{constant}$$

$$\boxed{\frac{P}{T} = \text{constant}}$$

4. **Adiabatic Process**: when there is no exchange of heat taking place between the system and its surrounding.

i.e $\Delta Q = 0$

In Adiabatic Process $\boxed{PV^{\gamma} = \text{constant}}$

$\gamma \rightarrow$ adiabatic constant