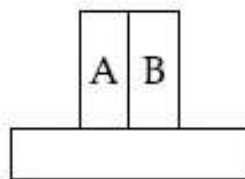


A bimetallic strip consists of metals A and B. It is mounted rigidly as shown. The metal A has higher coefficient of expansion compared to that of metal B. When the bimetallic strip is placed in a cold bath, it will : [\(JEE MAIN 2021\)](#)



- A Neither bend nor shrink
- B Bend towards the left
- C Not bend but shrink
- D Bend towards the right

$$\Delta L = L \alpha \Delta T$$

Here,  $\Delta L \rightarrow$  expands (if  $\Delta T$  is positive)

$\Delta L \rightarrow$  contracts (if  $\Delta T$  is negative)

It is given that bimetallic strip is dipped in cold bath  $\Rightarrow \Delta T$  is negative

$\Rightarrow$  Large value of  $\alpha \Rightarrow$  More contraction

As  $\alpha_A > \alpha_B$  (given)

$\Rightarrow$  A will contract more. Hence, bend towards left.

