

## ACHROMATIC COLOURING FOR FOUR COPIES OF BARBELL GRAPH TO FIND ACHROMATIC NUMBER IN BUTTERFLY GRAPH

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### **ABSTRACT**

*In this paper, we find the achromatic number for four copies of barbell graph to a butterfly graph. The largest possible number of colours in an achromatic colouring is called the achromatic number and is denoted by  $\chi_a(G)$ , where  $G$  is a finite un directed graph with no loops and multiple edges.*

**KEYWORDS:** *Four Copies of Barbell Graph, Butterfly Graph, Achromatic Number, Vertex Colouring*