

# Programme for Vertex Coloring for Complement Fuzzy Graph Using $\alpha$ -Cut

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## ABSTRACT

Let  $G = (V, \mu, \sigma)$  be a simple connected directed graph where  $V$  is a set of vertices and each vertex has a membership value  $\mu$  and each edge has a membership value  $\sigma$ . For different value  $\alpha$ -cut which depends on edge and vertex membership value of the graph, we will get different graph and different chromatic number. In this paper, we introduced a programme for coloring of complement fuzzy graph, to compute the chromatic number for coloring vertices of the fuzzy graph.

**Keywords:** Fuzzy graph, Vertex Coloring, Chromatic Number

