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## *n*-DOMINATION IN VERTEX SQUARED DOUBLE DIVIDE INTERVAL-VALUED FUZZY GRAPHS

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Abstract: In this paper we study different concepts like vertex squared double divide interval-valued fuzzy graph, vertex squared double divide cardinality, vertex squared double divide independent set, n- dominating set, n- dominating set and vertex squared double divide independent set for vertex squared double divide interval-valued fuzzy graphs. The vertex squared double divide interval-valued fuzzy graphs are more adaptable and viable than fuzzy graphs because of the way that they have numerous applications in networks. This work will be useful to concentrate enormous vertex squared double divide interval-valued fuzzy graphs as a mix of little vertex squared interval-valued fuzzy graphs. Vertex squared double divide interval-valued fuzzy graphs. The theoretical improvement in this space is talked about here.

**Keywords and Phrases:** Vertex Squared Double Divide Interval-Valued Fuzzy Graph (VSDDIVFG), *n*- Dominating Set, *n*- Domination Number, Vertex Squared Double Divide Independent Set.

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## 1. Introduction

Fuzzy graphs differ from the classical ones in several ways, among them the most prominent one is connectivity. Distance and central concepts additionally