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## A METHOD FOR SOLVING ASSIGNMENT PROBLEM USING RANKING OF CENTROID OF CENTROIDS IN TRAPEZOIDAL INTUITIONISTIC FUZZY NUMBER

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**Abstract:** In this paper, intuitionistic fuzzy assignment problem with ordering of trapezoidal intuitionistic fuzzy number (TIFN) is considered. The centroid of centroids in trapezoidal intuitionistic fuzzy numbers(TIFN's) is evaluated using a modern ranking technique. Furthermore, the proposed ranking method was used to find the best solution to the intuitionistic fuzzy assignment problem. Finally, a numerical illustration of the method is shown.

**Keywords and Phrases:** Intuitionistic fuzzy number - trapezoidal intuitionistic fuzzy number - triangular intuitionistic fuzzy number- ranking of trapezoidal intuitionistic fuzzy number.

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## 1. Introduction

The notion of fuzzy sets was introduced by Zadeh [14] and generalization of the fuzzy sets into intuitionistic fuzzy sets which includes the non-membership function