ABSTRAK

Nama : Leli Fatimah

NIM : 1167010041

Judul : ”Penyelesaian Masalah Penugasan Untuk Mencari Solusi Optimal Dengan Menggunakan Metode *Matrix Ones Interval Linear Assignment Problem* (MOILAP) Dan *New Approach Assignment Method* (NAA-*Method*)”

Penelitian ini membandingkan solusi optimal pada masalah penugasan dengan menggunakan Metode *Matrix Ones Interval Linear Assignment Problem* (MOILAP) dan *New Approach Assignment Method* (NAA-*Method*). Metode *Matrix Ones Interval Linear Assignment Problem* (MOILAP) menentukan solusi optimal dengan menggunakan nilai interval serta membagi setiap baris dan kolom dengan nilai terbesar atau terkecil, lalu melakukan penarikan garis seminimal mungkin untuk menutupi nilai interval [1-1] hingga mendapatkan solusi optimal. *New Approach Assignment Method* (NAA-*Method*) menentukan solusi optimal dengan melakukan pengurangan pada setiap baris dan kolomnya dengan nilai terkecil, kemudian menambahkan nilai 1 pada setiap baris dan kolom, lalu melakukan penarikan garis seminimal mungkin untuk menutupi nilai 1 pada setiap baris dan kolom. Pada dua studi kasus dalam objek penelitian ini disimpulkan bahwa Metode *Matrix Ones Interval Linear Assignment Problem* (MOILAP) Dan *New Approach Assignment Method* (NAA-*Method*) sama baiknya dalam menentukan solusi optimal pada masalah penugasan.

Kata Kunci : Riset Operasi, Optimisasi, Masalah Penugasan, Metode Hungarian, Metode *Matrix Ones Interval Linear Assignment Problem* (MOILAP) Dan *New Approach Assignment Method* (NAA-*Method*)

ABSTRACT

Name **: Leli Fatimah**

NIM **: 1167010041**

Tittle **: *"Work assignment resolution to Find Optimal Solutions Using the Matrix Ones Interval Linear Assignment Problem (MOILAP) Method and New Approach Assignment Method (NAA-Method) "***

This study compares the optimal solution of assignment problems using the Matrix Ones Interval Linear Assignment Problem (MOILAP) and New Approach Assignment Method (NAA-Method). The Matrix Ones Interval Linear Assignment Problem (MOILAP) Method needs the optimal solution by using interval values and dividing each row and column with the largest or smallest values, then drawing the lines as minimum as possible to cover the interval values [1-1] to get the optimal solutions. New Approach Assignment Method (NAA-Method) determine the optimal solution by subtracting each row and column with the smallest value, then adding a value of 1 to each row and column, then making a minimum line draw to cover the value of 1 in each row and column. In two case studies in this research, the object was concluded that the Matrix Ones Interval Linear Assignment Problem (MOILAP) Method and the New Approach Assignment Method (NAA-Method) are equally good in determining the optimal solutions to the work assignment problems.

Keywords: *Operations Research, Optimization, Assignment Problems, Hungarian Method, Matrix Ones Interval Linear Assignment Problem* (MOILAP) and *New Approach Assignment Method* (NAA-*Method*)