

## ABSTRAK

Dalam memberi label pada suatu graph dapat dilakukan dengan berbagai tipe. Tipe dalam pelabelan graph antara lain pelabelan *graceful*, pelabelan *edge-graceful*, dan pelabelan super *edge-graceful*. Gagasan graf super *edge-graceful* telah diperkenalkan oleh Mitchem dan Simoson pada tahun 1994. Namun, hanya sedikit contoh yang dikenal. Dalam Tugas Akhir ini, akan ditunjukkan pelabelan graf *graceful*, *edge-graceful*, dan super *edge-graceful* khususnya untuk *path* dan *fan graph*.

Kata kunci : pelabelan graf, *path*, *fan graph*, super *edge-graceful*

## **ABSTRACT**

The label on a graph can be done with various types. Type in graph labeling include graceful graph labeling, edge-graceful labeling, and super edge-graceful labeling. The idea of super edge-graceful graphs have been introduced by Mitchem and Simoson in 1994. However, few examples are known. In this Final Paper, will be shown graceful, edge-graceful, and super edge-graceful labeling especially for path and fan graph.

Key words : graph labelings, path, fan graph, super edge-graceful