

## Abstract

*Graph representation has been widely used in scientific study to analyze a pattern. Geographic maps, computer networks, chemical structures, and databases are examples of information that can be applied to graph representation. This is related to a graph representation method that makes manipulation data easier. The needs and growth of information make graph representation larger. Pattern analysis need more time while searching in larger graph. Therefore we need new method to searching graph pattern in a large graph.*

*In this final project, graph query language(graphQL) algorithm is used for searching graph pattern matching in a graph. This algorithm is used because it can searching graph pattern in graph databases by reducting search space. From experiment result, combination of local pruning and global pruning reduce search space with the result of reduction ratio and running time being lower. Smaller search space make process of searching graph pattern in graph faster.*

**Kata Kunci:** *algoritma graphQL, reduction ratio, running time, graph pattern.*