## **Abstract**

Today a lot of data in text in world. The large number of data in text make amount of research data about text increases. To produce research data text with accurate result required some things one is semantic relation. Semantic relation is relatedness between words based on the relationships that are owned by those words. Calculation on semantic relation can be solved using path base approach. Path representation semantic relation in graf. In this final project built a system that calculate semantic relation using path base approach. This system calculations involving influence of the number of text relationship,depth and combination weights and depth. Based on result showed that result of correlation belongs in weak correlation. Amount of relation can increase correlation and highest correlation occurred in calculation using weight and depth.

**Key Word:** semantic relation, path base, graph, weight and depth.