

## **ABSTRACT**

In this thesis we have combined the ideas about the graphs and the labelings of the graphs. We have discussed the size of graph, order of graph, degree of vertex, kinds of vertex, kinds of edge, kinds of graph and some operations on graphs. The main focus of the thesis is about the labelings of the graphs. We have defined vertex labeling, edge labeling and total labeling. The ideas of magic labeling are distinguished with respect to edge magic total labeling, vertex magic total labeling and super edge magic total labeling. Moreover, the basic concepts of magic labeling and duality are also discussed. In the end of this thesis we have introduced the concept of  $w$ -graph and  $w$ -tree. We also have formulated the super edge magic total labelings of  $w$ -tree as well as for disjoint unions of isomorphic and non isomorphic copies of  $w$ -trees.