

Abstract

In this thesis, we have introduced some new Graphs on chessboard. These Graphs are obtained through the all possible movement of rooks, bishops and queen placed anywhere on the chessboard, that is why the name Rook Graphs, Bishop Graphs and Queen Graphs are given resp. We have studied many algebraic, graphical and combinatorial properties of these Graphs. We have determined their sizes, connectedness and the relation of size among themselves. We have also found the minimal vertex covers of these Graphs. We have also found that from which family they belong. We have discussed their radius, diameter and other properties as well. Along with this we tried to partitioned these graphs whether these are Eulerian or not.