P R E F A C E

The matrix eigenvalue problem is one of the most important tool in numerical analysis. Many problems in Physics, Egineering and Social sciences reduce to an eigenvalue problem. The present dissertation entitled "The Eigenvalue Problems and their Computer Implementation. " attempts to develop programs for computing Eigenvalues and eigenvectors of a matrix.

In this dissertation Eigenvalue Problems and their examples in wide area of applications are discribed in chapter 1 and chapter 2. Chapter 3 deals with various methods for computing eigenvalues and eigenvectors of a matrix. The program listings and the output of the programs are included in chapter 4.