CHAPTER I

INTRODUCTION

P.H. Doyle and J.G. Hocking have shown that if S^n is the n-sphere then for any non-empty open subset U of S^n there is a homeomorphism h from S^n onto itself such that $h(S^n-U)$ lies in U. From this fact about the n-sphere, they define the concept of invertible spaces and proved that every invertible n-manifold is homeomorphic to S^n. The next natural class of topological spaces to consider is the polyhedra and in this thesis we shall start with the simplest of them, the graphs. We shall show that an invertible graph is homeomorphic to the circle S^1.

To make this study self contained some topological concepts are provided in chapter II and chapter III.