

*Abstract* - This report presents the topics of the Seminar held in Lecce by prof. J. Szép. The purpose of the Seminar was to introduce the participants to the study of Semigroup Theory, and at the same time to provide some hints for research. In part I, after some definitions, the problems of partitions and classification of semigroups are examined. The subject of part II is a theorem on structure of algebras with two operations; moreover some research problems are suggested. Finally part III gives an introduction to the Theory of automata, with various examples.