# STUDY AND IMPLEMENTATION OF Z LANGUAGE PROCESSOR

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## ABSTRACT

The formal specification language Z becomes of central importance both in computer science and in software engineering in recent years. The formal specification language is the one of the most fundamental tools of software engineers who are using it to provide the precise statements of what a system is to do. Currently there are very few and limited tools specifically for the Z language. This exactly is the major concern of the author and as a result to the birth of the project. This project starts by reviewing the key concept/ terminology of language processors and also looks inside the compilers and interpreters. The project further studies the implementation of language processor specifically for the formal specification language Z. At the completion of this project, the language processor provides the capability of checking specifications produced in Z for correctness. As a result, the developers can generate Z specifications directly in the computer using the language processor and make the Z language, one of the most popular specification languages steps forward.