Ada Compiler CS355:Compiler Design

Anshu Avinash anshuavi@iitk.ac.in

Pranjal Singh spranjal@iitk.ac.in

Atique Firoz atiquef@iitk.ac.in

Parth Tripathi partht@iitk.ac.in

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Ada is a strongly typed, modular, object oriented, concurrent, readable and expressible high-level computer programming language [1]. In this project we would be creating a compiler for a subset of Ada language. We would be implementing following features:

- <u>Type System</u>: Ada's type system is governed by four principles: Strong typing, Static typing, Abstraction and Name equivalence.
- Exception: Ada has modules which raise an error when certain conditions are not satisfied and another module which does corresponding error-handling.
 - Predefined: They are included in Standard package. Some of them are: Constraint_Error, Program_Error,
 Storage_Error, Tasking_Error
 - <u>Input/Output</u>: These exceptions raised by subprograms of the predefined package *Ada. Text_IO*. Some of them are **End_Error**, **Data_Error**, **Mode_Error**, **Layout_Error**
 - Raising exceptions: The raise statement explicitly raises a specified exception.

References

[1] Ada Information ClearingHouse: News and resources for Ada programming language. URL: http://www.adaic.org.