

CS335 : Project Report

Group 5 : Object PASCAL Compiler

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Aim of the Project :

To build a compiler for Object Pascal supporting basic arithmetic and relational operations, conditional statements, iterative statements, records, procedures , functions, object features like inheritance , constructors and access modifiers, event handlers and polymorphism. Error handling and type checking is also to be handled.

What has been achieved :

- basic data types
- arithmetic and relational operators
- if-then-else statements
- iterative statements (for, while, repeat-until)
- one dimensional and multi dimensional arrays and records
- procedures, functions, recursion, procedure within procedure
- objects : attributes, functions, inheritance, access modifiers
- error handling and type checking
- machine and intermediate code for all above part is accomplished
- semantic analysis of case statements
- reading input and writing output

What has not been achieved :

- 3 address and machine code for case statements
- constructors and destructors
- event handlers and polymorphism
- 3 address and machine code for pointers

Contribution of team members :

- Divyanshu and Rishi : Type checking for semantic phase
- Vaibhav and Abhishek : Symbol Table handling for semantic phase
- Abhishek and Rishi : Conditional and iteration handling in code generation
- Divyanshu and Vaibhav : Procedure and object handling in code generation