

Assignment 4

CS 348 Introduction to Programming Languages Laboratory

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Parser for PASCAL

Environment used to run the program:

gcc version 9.3.0 (Ubuntu 9.3.0-17ubuntu1~20.04)

Installation:

```
sudo apt-get install bison flex
```

Command to compile:

```
./run.sh
```

OR

```
yacc -Wnone 180101057.y
```

```
lex 180101057.l
```

```
g++ -g -w lex.yy.c
```

To check on input:

```
./a.out < incorrect_input.pas
```

```
./a.out < correct_input.pas
```

File description

1. `pascal.h`: Contains global variables and basic function implemetations.
2. `hash_table.cpp`: Contains C++ implementation of hash table to store string values.
3. `180101057.y`: Contain yacc definition for grammar of Pascal program.
4. `y.tab.c`: Auto-generated by yacc. Contains yacc code converted to C++ code.
5. `lex.yy.c`: Auto-generated by lex. Contains lex code converted to C++ code.
6. `incorrect_input.txt`: Contains sample PASCAL program with some errors.
7. `correct_input.txt`: Contains sample PASCAL program without any errors.
8. `id_table.txt`: Contains values stored in `id_table` upon completion of program.