

Compiler Construction

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Practical-3

Objective

- To find the First () and Follow () of a grammar

Introduction

- The construction of both top-down and bottom-up parsers is aided by two functions, FIRST and FOLLOW , associated with a grammar G . During top-down parsing, FIRST and FOLLOW allow us to choose which production to apply, based on the next input symbol.
- During panic-mode error recovery, sets of tokens produced by FOLLOW can be used as synchronizing tokens.

Input file:

E->TR

R->+TR|#

T->FY

Y->*FY|#

F->(E)|i

Output file:

```
vedant@vedant-Inspiron-7572:~/Desktop/Compiler_construction/prac3$ ./a.out
No of production : 5
E->TR
R->+TR|#
T->FY
Y->*FY|#
F->(E)|i

----- FIRST -----
E : ( i
R : + #
T : ( i
Y : * #
F : ( i

----- FOLLOW -----
E : $ )
R : $ )
T : + $ )
Y : + $ )
F : * + $ )
```

Conclusion

In this program we have learnt about implementation of FIRST and FOLLOW of given grammar.