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1   cs323-project-phase2

catalogue

1.1   General introduction

Completion status：

Pass all basic sample tests，and finish some additionally supported features

1.2   Design part

- Using class rec as a node, there are types var,fun,arr, etc., and actions usfun,usassign, etc

- Create initial node in lex

- In Bison, define first, obtain a global map, Link the desired elements on the nodes of all action types and then judge the action type of each node

1.3   Run part

- When dfs runs the tree, the node of the action type is assigned a value of the corresponding type, which is convenient for use in nested calls later

- In the recs of rec, for the array will store the value related to its size, the number of values represents the number of dimensions, for Exp expression we will store the result of the operation in the val property of rec, for return will look for a specific statement, get its val

1.4   Bonus

- Tests for undefined variables are performed, For example, delete the definition of aa or the definition of r in Example 5

- The processing of arrays will help us to check the array overreach