C++ Programming Articles

Submit Article

PROGRAM TO IMPLEMENT RECURSIVE DESCENT PARSER

Posted By: Adalberto Fischer **Category:** C++ Programming **Views:** 11483

PROGRAM TO IMPLEMENT RECURSIVE DESCENT PARSER.

Code for PROGRAM TO IMPLEMENT RECURSIVE DESCENT PARSER in C++ Programming

```
#include <iostream.h>
#include <stdio.h>
#include <conio.h>
#include <string.h>
#include <stdlib.h>


typedef struct treenode
{
    char info;
    treenode *left;
    treenode *right;
}node;


    node * proc_e(char input[],int &ssm);
    node * proc_t(char input[],int &ssm);
    node * proc_v(char input[],int &ssm);
    void traversal(node *temp);

void main()
{
    char input[20];
    int ssm=0;
    node *root;
    clrscr();

    cout<<endl<<"ENTER THE STRING TO BE PARSED:";
    cin>>input;

    root = proc_e(input,ssm);
    cout<<endl<<"CONTENTS OF THE PARSE TREE:";
    traversal(root);


    getch();
}


void traversal(node *temp)
{


   if(temp != NULL)
   {
    traversal(temp->left);
    cout<<temp->info;
    traversal(temp->right);
    }
}


//PROCEDURE FOR NT E:

node * proc_e(char input[],int &ssm)
{
    node *a,*b;

    a=proc_t(input,ssm);

    while(input[ssm]=='+')
    {
        ssm++;
```

```
        b=proc_t(input,ssm);

        node *temp;
        temp=new node; //(node*)malloc(sizeof(node));
        temp->info='+';
        temp->left=a;
        temp->right=b;

        a=temp;

    }

    return a;
}




//PROCEDURE FOR NT T:

node * proc_t(char input[],int &ssm)
{
    node *a,*b;

    a=proc_v(input,ssm);
    ssm = ssm + 1;

    while(input[ssm] == '*')
    {
        ssm++;

        b=proc_v(input,ssm);
        node *temp;

        temp=new node;//(node *)malloc(sizeof(node));
        temp->info='*';
        temp->left=a;
        temp->right=b;

        a=temp;
        ssm = ssm +1;
    }

    return a;


}



//PROCEDURE FOR NT V:

node * proc_v(char input[],int &ssm)
{
    node *a;

    if(input[ssm]=='I')
    {
        node *temp;
        temp=new node; //(node*)malloc(sizeof(node));
        temp->info='I';
        temp->left=NULL;
        temp->right=NULL;
        return temp;
    }
    else
    {
        cout<<endl<<"ERROR. INVALID SYMBOL "<<input[ssm];
        getch();
        exit(0);
    }
}
```

Share:

Previous Post:
To parse a string using Operator Precedence parsing

Next Post:
To parse a string using Recursive-Descent parser

Adalberto Fischer author of PROGRAM TO IMPLEMENT RECURSIVE DESCENT PARSER is from Frankfurt, Germany.

AJAX Framework
Design Pattern
UML
WPF
WCF
SEO
PowerShell
Visual Studio
WWF
BizTalk Server
Azure
General
Testing
Online Certifications
PHP
My SQL
LinQ
Project Management
Silverlight
XML
MS Office
Windows OS
DHTML
Sharepoint

View All Articles

Related Articles and Code:

- PROGRAM TO IMPLEMENT RECURSIVE DESCENT PARSER
- PROGRAM TO IMPLEMENT RECURSIVE DESCENT PARSER
- To parse a string using Recursive-Descent parser
- To parse a string using Recursive-Descent parser
- Example of recursive function
- Program to solve the Towers of Hanoi Problem (using Recursive Algorithm)
- Program to solve the Towers of Hanoi Problem (using Recursive Algorithm)
- Program to coumputes and displays the factorial of the given number (using Recursive Algorithm)
- Recursive program to generate fibonacci Series
- Recursive program for following operations fibonacci series
- Program to show an example of using a recursive method in a class
- Program of parser 1
- Program of parser 2
- Program of LL1 parser
- Program pf parser 1
- To parse a string using First and Follow algorithm and LL-1 parser
- To parse a string using First and Follow algorithm and LL-1 parser
- Program of LL Parser
- Program of LL Parser
- Program that implements depth first search algorithm.

Other Interesting Articles in C++ Programming:

- Program that performs selection search
- Program to draw a Bezier Curve of nth degree
- Program to illustrate the functions returning pointers
- Program to perform quick sort
- Program to draw a 3D Cubic Bezier Curve
- Program to illustrate unary operator(decrement operator) overloading without return type
- Program that prints all the even numbers b/w 0 to 50 (using while, do-while and for loop)
- Program that defines template of vector class that provides modify and multiplication facility
- Program to fill different types of geometric shapes using Flood Fill Algorithm
- Write a program to Add Two Matrix
- Program that reads marks obtained by a student in a test of 100 marks and computes his grade
- Program to estimate the Differential value of a given function using Runge-Kutta Methods
- Program to illustrate the overloading of constructors in classes
- Program of address calculation sort
- Program of simple windows & buttons
- Program that reads an expression consisting of two non-negative integer and an operator. Determine if either integer or the result of the expres.....
- Program of displaying product inventory by converting one class to another class
- PROGRAM TO IMPLEMENT RECURSIVE DESCENT PARSER
- Program to convert an Infix Expression into a Postfix / Suffix Expression without parenthesize
- Program to illustrate the implementation of 3D Rotation Transformation along x-axis

Please enter your Comment

- Comment should be atleast 30 Characters.
- Please put code inside [Code] your code [/Code].

Please login to post comment

No Comment Found, Be the First to post comment!