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To Implement Predictive Parsing in C

8 Years Ago (<https://www.daniweb.com/programming/software-development/code/216952/to-impl...>)




This Program implements the Predictive Parsing Of the grammar

$E \rightarrow E+T/T$

$F \rightarrow F*T/F$

$F \rightarrow \text{id}(\text{Identifier})$



— praneeth_gunda  2 (/members/175763/praneethgunda) 21 posts since Jun 2007

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```

1. //To Implement Predictive Parsing
2. #include<string.h>
3. #include<conio.h>
4. char a[10];
5. int top=-1,i;
6. void error(){
7. printf("Syntax Error");
8. }
9. void push(char k[]) //Pushes The Set Of Characters on to the Stack
10. {
11.     for(i=0;k[i]!='\0';i++)
12.     {
13.         if(top<9)
14.         a[++top]=k[i];
15.     }
16. }
17. char TOS()          //Returns TOP of the Stack
18. {
19.     return a[top];
20. }
21. void pop()          //Pops 1 element from the Stack
22. {
23.     if(top>=0)
24.         a[top--]='\0';
25. }
26. void display() //Displays Elements Of Stack
27. {
28.     for(i=0;i<=top;i++)
29.         printf("%c",a[i]);
30. }
31. void display1(char p[],int m) //Displays The Present Input String
32. {
33.     int l;
34.     printf("\t");
35.     for(l=m;p[l]!='\0';l++)
36.         printf("%c",p[l]);
37. }
38. char* stack(){
39.     return a;
40. }
41. int main()
42. {
43.     char ip[20],r[20],st,an;
44.     int ir,ic,j=0,k;
45.     char t[5][6][10]={"$","$","TH","$","TH","$",
46.         "+TH","$","e","e","$","e",
47.         "$","$","FU","$","FU","$",
48.         "e","*FU","e","e","$","e",

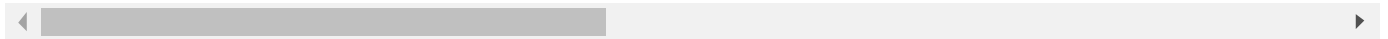
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```
49.         "$", "$", "(E)", "$", "i", "$");
50.     clrscr();
51.     printf("\nEnter any String(Append with $)");
52.     gets(ip);
53.     printf("Stack\tInput\tOutput\n\n");
54.     push("$E");
55.     display();
56.     printf("\t%s\n", ip);
57.     for(j=0; ip[j]!='\0';)
58.     {
59.         if(TOS()==an)
60.         {
61.             pop();
62.             display();
63.             display1(ip, j+1);
64.             printf("\tPOP\n");
65.             j++;
66.         }
67.         an=ip[j];
68.         st=TOS();
69.         if(st=='E')ir=0;
70.         else if(st=='H')ir=1;
71.         else if(st=='T')ir=2;
72.         else if(st=='U')ir=3;
73.         else if(st=='F')ir=4;
74.         else {
75.             error();
76.             break;
77.         }
78.         if(an=='+')ic=0;
79.         else if(an=='*')ic=1;
80.         else if(an=='(')ic=2;
81.         else if(an=='')ic=3;
82.         else if((an>='a'&&an<='z')||(an>='A'&&an<='Z')){ic=4;an='i';}
83.         else if(an=='$')ic=5;
84.         strcpy(r, strrev(t[ir][ic]));
85.         strrev(t[ir][ic]);
86.         pop();
87.         push(r);
88.         if(TOS()=='e')
89.         {
90.             pop();
91.             display();
92.             display1(ip, j);
93.             printf("\t%c->%c\n", st, 238);
94.         }
95.         else{
96.             display();
97.             display1(ip, j);
```

```
98.     printf("\t%c->%s\n",st,t[ir][ic]);
99.     }
100.    if(TOS()=='$'&&an=='$')
101.        break;
102.    if(TOS()=='$'){
103.        error();
104.        break;
105.    }
106.    }
107.    k=strcmp(stack(),"$");
108.    if(k==0 && i==strlen(ip))
109.        printf("\n Given String is accepted");
110.    else
111.        printf("\n Given String is not accepted");
112.    return 0;
113. }
```

[c \(/tags/c\)](/tags/c)

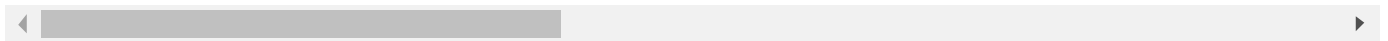
(/members/280699/hariharanb) hariharanb (/members/280699/hariharanb) 8 Years Ag...



For which input will this program work?



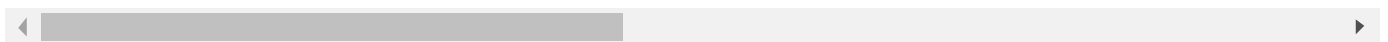
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what should be the input?
can plz rply fast

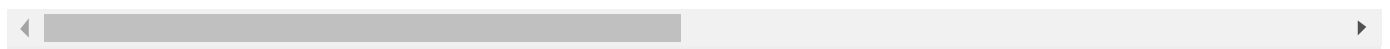


(/members/856261/viziworld) viziworld (/members/856261/viziworld) 5 Years Ago (https...



hey this program is not correct this is just blow your head.

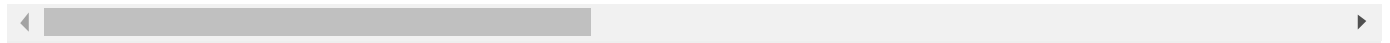
suraiyaparveen (/members/1122370/suraiyaparveen) 1 Year Ago (<https://www.daniweb.co...>)



i want the exact program to eliminate ambiguity, left recursion, left factoring and also for construction of transition diagram



(/members/838005/schol-r-lea) Schol-R-LEA **1,003** (/members/838005/schol-r-lea) 1 Y...



suraiyaparveen: You won't get it, for two reasons. First, no such program exists - those are all things that need to be done manually, not programs to be written. Second, even if it were feasible to do those things programmatically, *we wouldn't give it to you* without some evidence that **you** had put in a good faith effort to solve the problems on your own first. Daniweb is not a free homework cheating service, and no one here is going to do your work for you.

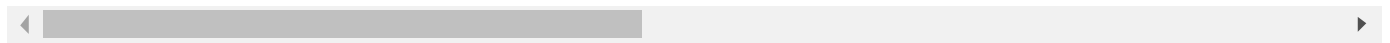
Also, don't go reviving long-dead threads. Thread necromancy is considered extremely rude on pretty much every message board on the web, and is just one more reason for most of the people here to ignore you or worse.

Comments

💬 rubberman (/members/715612/rubberman): Ah! Digital necromancy! Time to raise the long dead!



(/members/1127180/istiaq) Istiaq (/members/1127180/istiaq) 6 Months Ago (<https://ww...>)



Would you please tell us the input procedure of this program? How the input is given?

polopo (/members/1131459/polopo) 3 Weeks Ago (<https://www.daniweb.com/programming...>)



NOT Working dumbass..or else give me the input you have taken

Submit your Reply Alt+S

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