

EXPERIMENT-7

AIM:

Write a C program to find FIRST() - predictive parser for the given grammar

PROGRAM:

```
File Edit Search View Project Execute Tools ASStyle Window Help
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(globals) Project Classes Debug EXP_1.cpp
1 #include <stdio.h>
2 #include <ctype.h>
3 #include <string.h>
4 char productions[10][10];
5 char firstSet[10];
6 int n, idx = 0;
7 void findFirst(char c) {
8     for(int i = 0; i < n; i++) {
9         if(productions[i][0] == c) {
10             if(!isupper(productions[i][2])) {
11                 firstSet[idx++] = productions[i][2];
12             } else {
13                 findFirst(productions[i][2]);
14             }
15         }
16     }
17 }
18 int main() {
19     char nonTerminal;
20     printf("Enter number of productions: ");
21     scanf("%d", &n);
22     printf("Enter the productions (Example: A=aB):\n");
23     for(int i = 0; i < n; i++)
24         scanf("%s", productions[i]);
25     printf("\nFind FIRST of: ");
}
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Compilation results...
-----
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Haritha\OneDrive\Documents\EXP_1.exe
- Output Size: 130.5556640625 KiB
- Compilation Time: 0.64s
```

OUTPUT:

```
Enter number of productions: 2
Enter the productions (Example: A=aB):
E=T+B
T=T*F

Find FIRST of: E
-----
Process exited after 42.13 seconds with return value 3221225725
Press any key to continue . . .
```