# **Problem #3: Function Finder Fun**

Program Name: function.java Input File: function.dat

Sometimes in programming it's useful to know what functions are called by a snippet of code. You want to write a program that will do just that.

#### Input

Input will be a snippet of code, 1-100 lines in length.

#### Output

Output will be the function names, in the order that they occur in the code, each on their own line. For the purpose of this problem, a function name will be a sequence of alphabetic [a-zA-Z] characters <u>immediately</u> to left of a '(' as long as the name is not one of the following reserved words:

if, while, for, switch, return

Function names should only be output the first time they are encountered in the code.

## **Example Input File**

```
int x,y;
int z=(3 + 2) * 5;

System.out.println("Test");

for(x = 0; x < 20; x++)
    for(y = 0; y < 30; y++)
        if(y == 1)
            System.out.println(x + "+" + y + "=" + (x + y));

while(z <= 25)
{
    foo(z);
    parse(z + 3);
    z++;
}

return(x * y * z);</pre>
```

### **Example Output To Screen**

```
println
foo
parse
```