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DELL@DESKTOP-GCE057R MINGW64 ~/OneDrive/Desktop/Notification
$ flex lexer.l.txt
```

```
DELL@DESKTOP-GCE057R MINGW64 ~/OneDrive/Desktop/Notification
$ bison -d tac.y --warnings=none
tac.y: conflicts: 93 shift/reduce, 34 reduce/reduce
```

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DELL@DESKTOP-GCE057R MINGW64 ~/OneDrive/Desktop/Notification
$ g++ tac.tab.c -w -o gocompiler
```

```
DELL@DESKTOP-GCE057R MINGW64 ~/OneDrive/Desktop/Notification
$ ./gocompiler.exe<test.go
Inside main
Read the input file, continue with Lexing and Parsing
Performing Lexical analysis.....
```

```
Pushed to stack : sum
Pushed to stack : =
Stack Top = sum
Pushed to stack : 0
Stack Top 0 = sum
sum = 0
Pushed to stack : i
Pushed to stack : b
Pushed to stack : b
Pushed to stack : =
Stack Top = b b i
Pushed to stack : 10
Stack Top 10 = b b
Pushed to stack : *
Stack Top * 10 = b
Pushed to stack : 6
Stack Top 6 * 10 =
Pushed to stack : +
Stack Top + 6 * 10
Pushed to stack : 5
Stack Top 5 + 6 *
T0 = 6 + 5
T1 = 10 * T0
b = T1
Pushed to stack : i
Pushed to stack : =
```

Pushed to stack : =  
Stack Top = i b b  
Pushed to stack : 0  
Stack Top 0 = i b  
i = 0

L0:  
Pushed to stack : i  
Pushed to stack : <  
Stack Top < i i b  
Pushed to stack : 10  
Stack Top 10 < i i  
T2 = i < 10  
T3 = not T2  
if T3 goto L1  
goto L2

L3:  
Pushed to stack : i  
Pushed to stack : +  
Pushed to stack : 1  
T4 = i + 1  
Pushed to stack : =  
hello = T4 T2  
Pushed to stack : T4  
hello T4 = T4  
i = T4  
goto L0

L2:  
Pushed to stack : sum  
Pushed to stack : +  
Pushed to stack : 1  
T5 = sum + 1  
Pushed to stack : =  
hello = T5 i  
Pushed to stack : T5  
hello T5 = T5  
sum = T5  
goto L3

L1:  
Pushed to stack : a  
Pushed to stack : =  
Stack Top = a sum i  
Pushed to stack : 2  
Stack Top 2 = a sum

Stack Top 2 = a sum  
a = 2  
Pushed to stack : F  
Pushed to stack : =  
Stack Top = F a sum  
Pushed to stack : "Hello"  
Stack Top "Hello" = F a  
F = "Hello"  
Pushed to stack : 7  
Stack Top 7 F a sum  
Pushed to stack : ==  
Stack Top == 7 F a  
Pushed to stack : 0  
Stack Top 0 == 7 F  
T6 = 7 == 0  
Pushed to stack : 8  
Stack Top 8 T6 F a  
Pushed to stack : >=  
Stack Top >= 8 T6 F  
Pushed to stack : 0  
Stack Top 0 >= 8 T6  
T7 = 8 >= 0  
Pushed to stack : num  
Pushed to stack : =  
Stack Top = num T7 T6  
Pushed to stack : 9  
Stack Top 9 = num T7  
num = 9  
Pushed to stack : num  
Pushed to stack : <  
Stack Top < num num T7  
Pushed to stack : 0  
Stack Top 0 < num num  
T8 = num < 0  
Pushed to stack : num  
Pushed to stack : <  
Stack Top < num T8 num  
Pushed to stack : 10  
Stack Top 10 < num T8  
T9 = num < 10  
Input Exhausted!

Parsing completed.

Parsing completed.

-----ICG in the Three address code in form of Quadruples-----

| Operator | Arg1    | Arg2   | Result |
|----------|---------|--------|--------|
| =        | 0       | (null) | sum    |
| +        | 6       | 5      | T0     |
| *        | 10      | T0     | T1     |
| =        | T1      | (null) | b      |
| =        | 0       | (null) | i      |
| Label    | (null)  | (null) | L0     |
| <        | i       | 10     | T2     |
| not      | T2      | (null) | T3     |
| if       | T3      | (null) | L1     |
| goto     | (null)  | (null) | L2     |
| Label    | (null)  | (null) | L3     |
| +        | i       | 1      | T4     |
| =        | T4      | (null) | i      |
| goto     | (null)  | (null) | L0     |
| Label    | (null)  | (null) | L2     |
| +        | sum     | 1      | T5     |
| =        | T5      | (null) | sum    |
| goto     | (null)  | (null) | L3     |
| Label    | (null)  | (null) | L1     |
| =        | 2       | (null) | a      |
| =        | "Hello" | (null) | F      |
| ==       | 7       | 0      | T6     |
| >=       | 8       | 0      | T7     |
| =        | 9       | (null) | num    |
| <        | num     | 0      | T8     |
| <        | num     | 10     | T9     |