

Assignment 9:READ ME

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To Build:
"make"
To Run:
"./tac <[inputfile]"

output will be generated in the file "output.txt" and symbol table in "SYMTAB.txt"

NOTES:

>I have done explicit type checking in expression blocks for int-float clashes only [as mentioned in assignment]

Other non-trivial type clashes will give error [also float can hold an int by explicit typeconversion
but the reverse will give error]

I have made some changes in the given grammar [functionality is all the same]:

1>

```
stmt :  
assignmentStmt SEMICOLON  
|readStmt SEMICOLON  
|printStmt SEMICOLON
```

```
stmtList:  
    stmtList M1 stmt  
    |M2 stmt
```

These are some semicolon issues. Kindly note the given input sets will have a slight syntax error in my parser due to semicolon at the end of the declaration

GIVEN VERSION :

```
def  
    a:int;  
    b:int;  
    sum:float;  
    xpos:float;  
    ypos:float;  
    temp: float [notice no semicolon so will give syntax error]  
end  
However,  
def  
    a:int;  
    b:int;  
    sum:float;
```

```
xpos:float;  
ypos:float;  
temp: float; [will work perfectly]
```

end

All these modified test cases are given in 3 test files , test1.txt[compiles properly],test2.txt[compiles properly],test3.txt[have error due boolean integer type clash..temp=1 but temp is a boolean!!]

2> I have introduced proper Markers for inheritted attributes

3> bExp ---> LEFT_PAREN M16 bExp RIGHT_PAREN was giving conflicts. So parenthesis in bExps have to in {}.This is not part of the grammer ,but I have introduced them to save some coding

So The Modified Rule :

bExp --> LEFT_BRACES M16 bExp RIGHT_BRACES