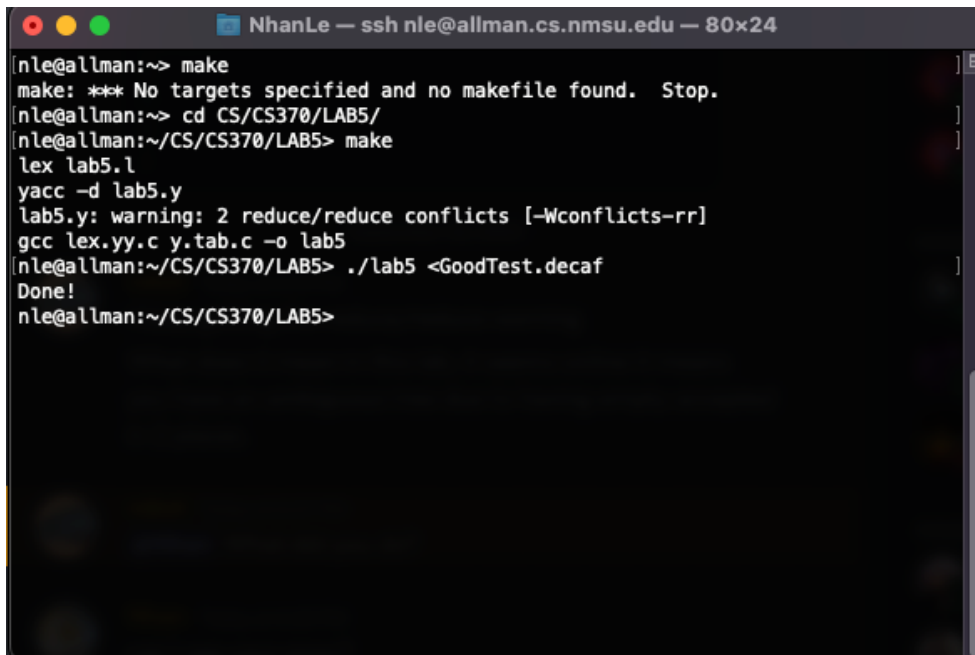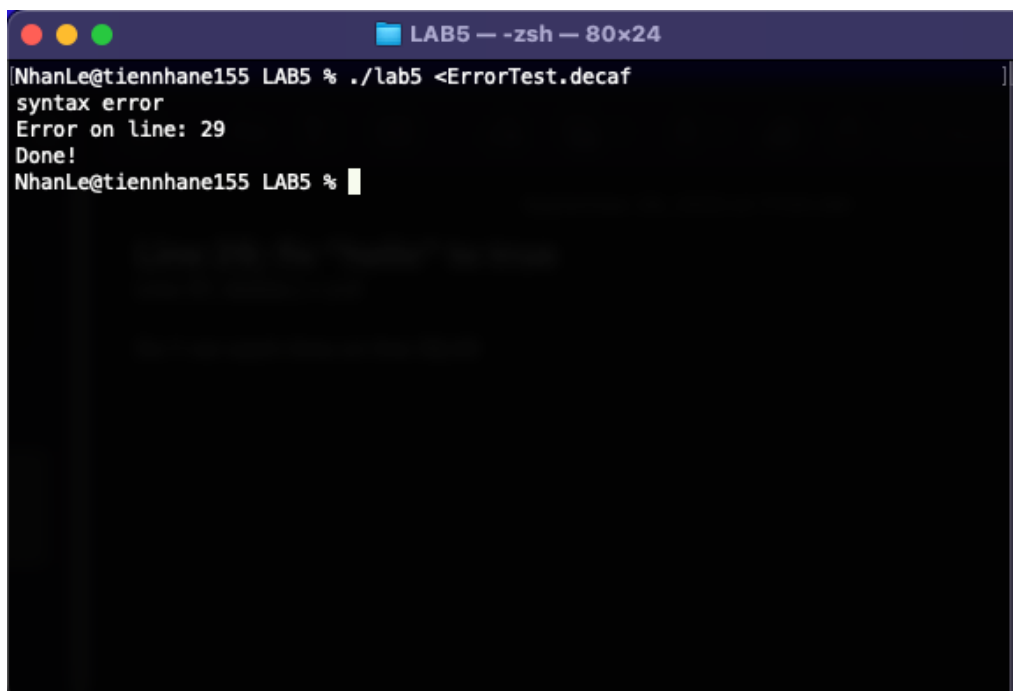Nhan Le
CS370
Lab5

1/ The output with GoodTest.decaf.


```
●  ●  ●              NhanLe — ssh nle@allman.cs.nmsu.edu — 80×24
[nle@allman:~> make
make: *** No targets specified and no makefile found.  Stop.
[nle@allman:~> cd CS/CS370/LAB5/
[nle@allman:~/CS/CS370/LAB5> make
lex lab5.l
yacc -d lab5.y
lab5.y: warning: 2 reduce/reduce conflicts [-Wconflicts-rr]
gcc lex.yy.c y.tab.c -o lab5
[nle@allman:~/CS/CS370/LAB5> ./lab5 <GoodTest.decaf
Done!
nle@allman:~/CS/CS370/LAB5>
```
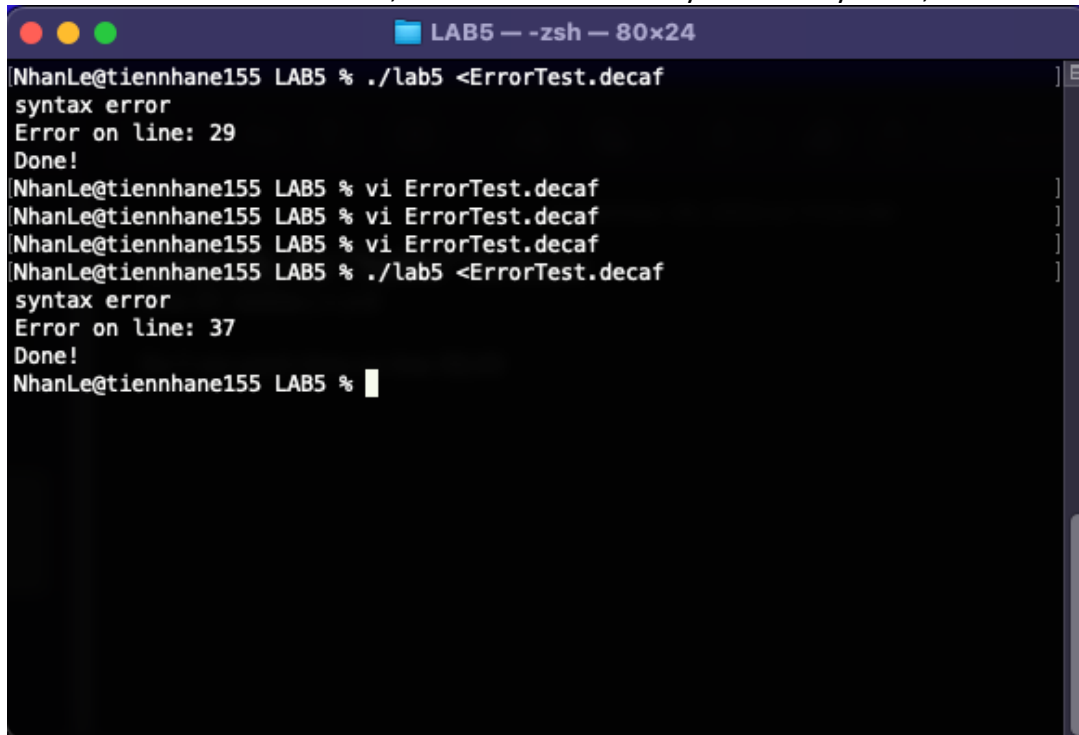
2/ The output with ErrorTest.decaf
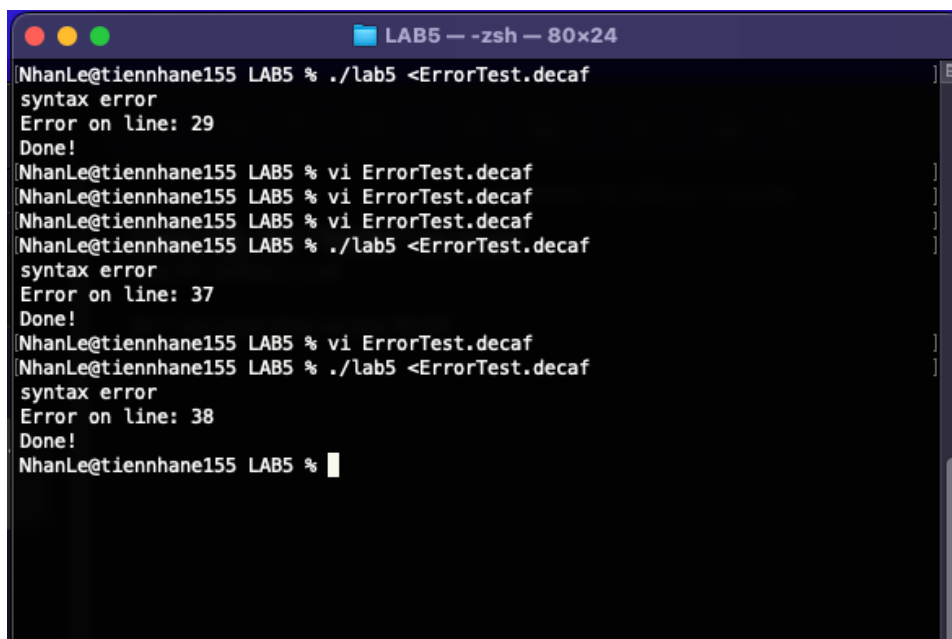The first error is on line 29 (c = "hello "). I changed it to c = true, so it does get any error.


```
●  ●  ●                    LAB5 — -zsh — 80×24
[NhanLe@tiennhane155 LAB5 % ./lab5 <ErrorTest.decaf
syntax error
Error on line: 29
Done!
NhanLe@tiennhane155 LAB5 %
```

The second error is on line 37, which haven't had any rule for it yet. So, I deleted it for now.

```
NhanLe@tiennhane155 LAB5 % ./lab5 <ErrorTest.decaf
syntax error
Error on line: 29
Done!
NhanLe@tiennhane155 LAB5 % vi ErrorTest.decaf
NhanLe@tiennhane155 LAB5 % vi ErrorTest.decaf
NhanLe@tiennhane155 LAB5 % vi ErrorTest.decaf
NhanLe@tiennhane155 LAB5 % ./lab5 <ErrorTest.decaf
syntax error
Error on line: 37
Done!
NhanLe@tiennhane155 LAB5 %
```

The third error is on line 38 and line 39 because they have the same structure. The variable in the for loop got error, we can't declare many variables in the same line for now.

```
NhanLe@tiennhane155 LAB5 % ./lab5 <ErrorTest.decaf
syntax error
Error on line: 29
Done!
NhanLe@tiennhane155 LAB5 % vi ErrorTest.decaf
NhanLe@tiennhane155 LAB5 % vi ErrorTest.decaf
NhanLe@tiennhane155 LAB5 % vi ErrorTest.decaf
NhanLe@tiennhane155 LAB5 % ./lab5 <ErrorTest.decaf
syntax error
Error on line: 37
Done!
NhanLe@tiennhane155 LAB5 % vi ErrorTest.decaf
NhanLe@tiennhane155 LAB5 % ./lab5 <ErrorTest.decaf
syntax error
Error on line: 38
Done!
NhanLe@tiennhane155 LAB5 %
```

```
[NhanLe@tiennhane155 LAB5 % ./lab5 <ErrorTest.decaf
syntax error
Error on line: 29
Done!
[NhanLe@tiennhane155 LAB5 % vi ErrorTest.decaf
[NhanLe@tiennhane155 LAB5 % vi ErrorTest.decaf
[NhanLe@tiennhane155 LAB5 % vi ErrorTest.decaf
[NhanLe@tiennhane155 LAB5 % ./lab5 <ErrorTest.decaf
syntax error
Error on line: 37
Done!
[NhanLe@tiennhane155 LAB5 % vi ErrorTest.decaf
[NhanLe@tiennhane155 LAB5 % ./lab5 <ErrorTest.decaf
syntax error
Error on line: 38
Done!
[NhanLe@tiennhane155 LAB5 % vi ErrorTest.decaf
[NhanLe@tiennhane155 LAB5 % ./lab5 <ErrorTest.decaf
syntax error
Error on line: 39
Done!
NhanLe@tiennhane155 LAB5 %
```

To fix all the error with the for loop. I changed for loop to for loop and declare new variable.

```
        func main() int {
                var i int;
                var j int;
                i = 0;
                j = 12;
                foo(1);
                while (i<j) {
                  i = print_int(i);
                  x = 0xBad0FF;   // HEX
                }
              }

} // end of package foo
```

```
[NhanLe@tiennhane155 LAB5 % ./lab5 <ErrorTest.decaf
Done!
NhanLe@tiennhane155 LAB5 %
```