

CS335-Compiler Design

Assignment

March 16, 2021

All the assignments to be implemented in C programming language.

1 Problem 0

Write a program in C which has a main program i.e. `main()` and two functions i.e. `fun1()` and `fun2()`, in three different files. Compile them separately and link to make single executable.

Note: Going forward all the programs should be implemented in a way that the file containing the main function will be used to call functions, where all the functions are declared and defined in separate files.

2 Problem 2

Write a program that takes a C source code as input, and removes the following

1. all the comments from it
2. more than one consecutive spaces

3 Problem 3

Find the strings generated by the following CFG:

```
S -> w c d S
S -> b L e
S -> s
L -> L ; S
L -> S
```

by applying, (1) zero production, (2) at most one production, (3) at most two production, (4) at most three production.