Assignment 1: CS335

Lexical Analysis using Flex

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1 Instructions

1.1 How to run testcases manually

Write these three lines of code in terminal to run the lexer file:

flex lex.l
g++ −o scan lex.yy.c −ll
./scan test1.csv < BubbleSort.java

The executable needs a csv file name to run. So suppose you want to get the result in *result.csv* then write the following command line:
./scan result.csv < BubbleSort.java
where *scan* is your executable.

1.2 How to run testcases using build.sh

NOTE: You can remove the testcases folder present in the ***200026-assign1*** folder and place your own testcases folder. Make sure to make separate folders of testcases for each type of language specification. Follow the steps given below to run all of the testcases in one go:

1. Create a new folder and place all of the testcases that you want to run in it.
2. Open ***build.sh*** file in any editor.
3. Replace ***lexer_name*** string with the path of the lexer file (***lex.l***).
4. Replace ***testcases_folder_path*** string with the path of the testcases folder.
5. Run ***./build.sh*** in terminal to get the result csv for all of the testcases present in the testcases folder.

The ***build.sh*** is a bash file that runs the lexer file on each of the testcase files present in the testcases folder and then prints their result in csv files having name whose prefix is the same as their respective testcase file.

2 Running build.sh

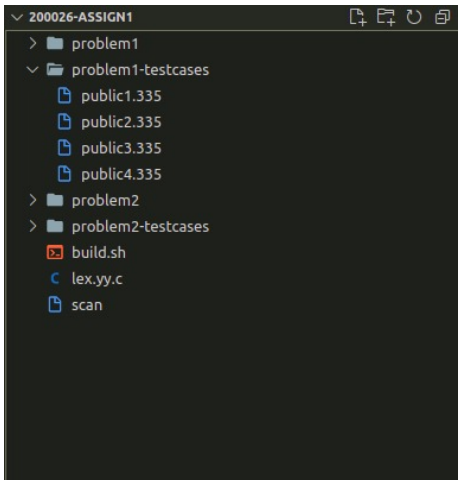

Figure 1: Add testcases folder

```
7  lexer_name="./problem1/lex.l" # Replace with the path of the lexer file
8  testcases_folder_path="./problem1-testcases" # Replace with the path to the folder containing the input files
```

Figure 2: Modify the variables of build.sh

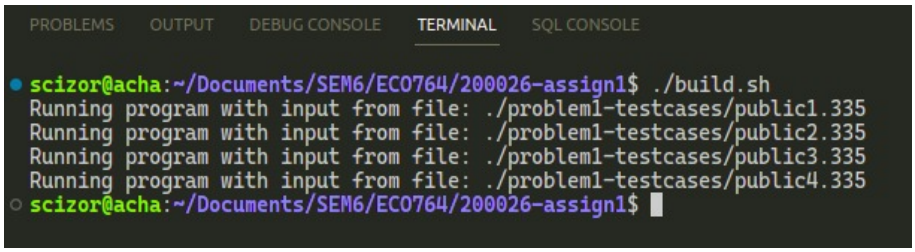

Figure 3: Run build.sh in terminal

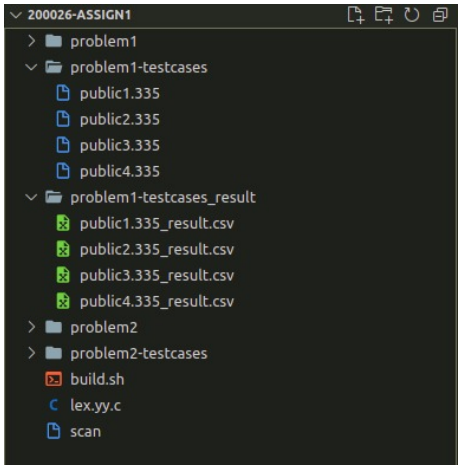

Figure 4: Find the result csv files in result folder