

Assignment 2

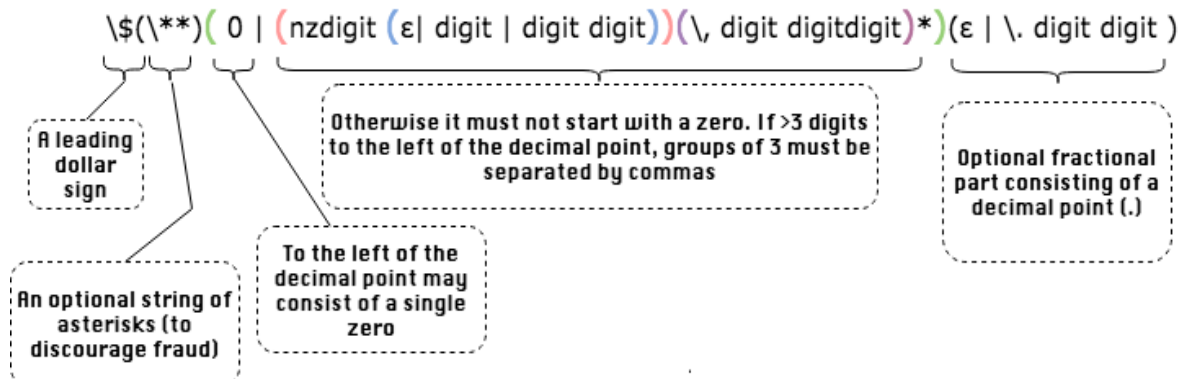
1. Chapter 2.6 - Exercise 2.1 (f): use the following expressions only

- i. A character
- ii. The empty string
- iii. Parenthesis
- iv. Concatenation
- v. 'Or'
- vi. Kleene star (Please use superscript star symbols, *)

In this regular expression the following have the specific meanings:

digit \rightarrow 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9

nzdigit \rightarrow 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9



2. Write a Java, C++, Python, JavaScript programs (without external library) that determines whether a given stream of characters is a financial quantity or not.

- i. The file names of the source codes should be Assn2.java, Assn2.cpp, Assn2.py, and Assn2.js.
- ii. The programs should read the input file name from the command-line arguments passed to the program. (args[], argv[], sys.argv[], and process.argv).
- iii. The program should read each line from an input file and print out its evaluation.
- iv. You can use any regular expression which is allowed in the programming languages.
- v. Execution commands should be:
 - javac Assn2.java; java Assn2 a2_input.txt

- g++ Assn2.cpp -o Assn2; ./Assn2 a2_input.txt
- python Assn2.py a2_input.txt
- node Assn2.js a2_input.txt

vi. For MacOS, Linux users, you may need to run dos2unix to remove carriage return symbols in the a2 input.txt. vii. Expected output for the provided a2 input.txt.

Matched: $2,345.67$

Not Matched: $0,123.45$

Not Matched: $1,23.56$

Matched: $1,234,567.90$

Note. Your programs will be tested with a different test file.

```
Susans-MBP:Assignment2 slim$ javac Assn2.java; java Assn2 a2_input.txt
Matched:  $2,345.67$ 
Not Matched:  $0,123.45$ 
Not Matched:  $1,23.56$ 
Matched:  $1,234,567.90$ 
Susans-MBP:Assignment2 slim$ g++ Assn2.cpp -o Assn2; ./Assn2 a2_input.txt
Matched:  $2,345.67$ 
Not Matched:  $0,123.45$ 
Not Matched:  $1,23.56$ 
Matched:  $1,234,567.90$ 
Susans-MBP:Assignment2 slim$ python Assn2.py a2_input.txt
Matched:  $2,345.67$ 
Not Matched:  $0,123.45$ 
Not Matched:  $1,23.56$ 
Matched:  $1,234,567.90$ 
Susans-MBP:Assignment2 slim$ node Assn2.js a2_input.txt
Matched:  $2,345.67$ 
Not Matched:  $0,123.45$ 
Not Matched:  $1,23.56$ 
Matched:  $1,234,567.90$ 
Susans-MBP:Assignment2 slim$
```