

Jiahao Liang

CSCI220

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

Project 2

The compiler I used is coderunner in vscode;

The compiler environment is C++ 17

File names: sq_stack.h, calculator.h, test_driver.cpp

For extra credit: my program is to be able to handle illegal expressions and can handle optional spacing between the two tokens. An illegal expression may contain tokens that are neither integers nor valid operators nor parenthesis.

csci220f21_src > project_2 >  test_driver.cpp >  main(int, char * [])

```
1 //
2 // test_driver.cpp
3 // Created by Jiahao Liang on 11/2/21.
4
5 #include "calculator.h"
6
7 #include <iomanip>
8 #include <iostream>
9 #include <memory>
10 #include <stdexcept>
11 #include <string>
12
13 #define WINDOWS false
14 const size_t expressionLength = 999;
15
16 inline void printGreetingMessage();
17 inline std::string getExpression();
18 void printResult(const std::unique_ptr<calculator<double, expressionLength>> &);
19 template <typename T>
20 inline T getUserInput(const std::string &prompt);
21 inline void clearScreen();
22 inline void clearInstream();
```

问题 11 OUTPUT TERMINAL DEBUG CONSOLE

```
→ project_2 git:(master) x cd "/Users/jay/Desktop/workspace/Mt.Sac CS/csci220f21_src/project_2/" && g++ test_driver.cpp -o test_driver.out -Wall -O2 -std=c++17 && ./test_driver.out
[Jiahao Liang} Calculator Enter 0 to exit the program.
Enter an expression: 5 * ( 2 + 3
ERROR: EXPECTED EXPRESSION
Enter an expression: -1 * 10 + 5
Postfix expression: -1 10 * 5 +
Result: -5.00
Enter an expression: 17 / ( 2 + 3 ) - 13
Postfix expression: 17 2 3 + / 13 -
Result: -9.60
Enter an expression: 5 * 2 ^ 3
Postfix expression: 5 2 3 ^ *
Result: 40.00
Enter an expression: 2 ^ 3 ^ 2
Postfix expression: 2 3 2 ^ ^
Result: 512.00
Enter an expression: 1 + -1
Postfix expression: 1 -1 +
Result: 0.00
Enter an expression: 0
Thanks for using my calculator.
→ project_2 git:(master) x
```