Lab 3 Programming Assignments

Note: Do these problems in the order that they appear.

Problem 1: Write a python program to check if an input expression has matching opening and closing symbols. First implement the **Stack** class in the file **mystack.py** and then use it to solve this problem.
Sample Runs:
Enter the expression: [((a+b) * {c-d}) / (a – f)]
Matched symbols.

Enter the expression: [((a+b) * {c-d}) / (a – f}]
Unmatched symbols.

Problem 2: Write a python program to evaluate a postfix expression. Use the Stack class built in the previous problem.
Sample Run:
Enter the postfix expression: 10 3 * 5 / 32 2 - +
The value of the expression is 36.0

Problem 3: Write a program to convert a prefix expression to a postfix expression

Problem 4: Write a program to evaluate a prefix expression.

Problem 5: Write a program to convert an infix expression to a postfix expression.