

Lab 1

Q1. Use the stack data structure learned from class to convert decimal number into binary number.

For example:

Input: 100

Output: 1100100

Stack should look like:

Quotient	Stack
1	1
3	1
6	0
12	0
25	1
50	0
100	0

Q2. What is the final Prefix expression of the follow:

$$4^2 * 3 - 3 + 8 / 4 / (1 + 1)$$

Q3. What is the final Postfix expression of the follow:

$$(4 + 8) * (6 - 5) / ((3 - 2) * (2 + 2))$$

Q4. What is the Infix expression after evaluating the following Postfix expression:

$$abc * + de / f * -$$