

Parenthesis Matching Code

3	*	2	-	(8	+	1)	10
0	1	2	3	4	5	6	7	8	9

$3 * 2 - (8 + 1)$

- ① $(? \rightarrow$ NO \rightarrow if yes push into the stack
- ② $) ? \rightarrow$ No \rightarrow if yes pop out of the stack

$\boxed{\times} = \text{Empty}$

```

int parenthesisMatch(char * exp) {
    struct stack * sp;
    // create the stack
    for (i=0; exp[i] != '\0'; i++) {
        if (exp[i] == '(') {
            push(sp, exp[i]);
        }
        else if (exp[i] == ')') {
            if (isEmpty(sp)) {
                return 0;
            }
            pop(sp);
        }
    }
    if (isEmpty(sp)) return 1;
    else return 0;
}
    
```