For this problem, the left most entry is assumed to be the top of the stack.
Any digit character is converted to an integer for arithmetic operations.

Initial Input and Stack:
Input: 2 3 + 4 * 5 –
Stack Contents :

Character Parsed: 2
Action: Stack.push(2)
Remaining Input: 3 + 4 * 5 -
Stack Contents: 2

Character Parsed: 3
Action: Stack.push(2)
Remaining Input: + 4 * 5 –
Stack Contents: 3 2

Character Parsed: +
Action: Stack.push(Stack.pop() + Stack.pop())
Remaining Input: 4 * 5 -
Stack Contents: 5

Character Parsed: 4
Action: Stack.push(4)
Remaining Input: * 5 –
Stack Contents: 4 5

Character Parsed: *
Action: Stack.push(Stack.pop() * Stack.pop())
Remaining Input: 5 –
Stack Contents: 20

Character Parsed: 5
Action: Stack.push(5)
Remaining Input: -
Stack Contents: 5 20

Character Parsed: -
Action: Stack.push(Stack.pop() + Stack.pop() * -1)
Remaining Input:
Stack Contents: 15

Final Evaluation: 15