Homework Turnin

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Section:	6G
Course:	TJHSST APCS 2016-17
Assignment:	06-02
Receipt ID:	f396d3386357785f91acef738d715676

Turnin Successful!

The following file(s) were received:

Postfix.java   (1425 bytes)

```java
1.  //name:       date:
2.
3.  import java.util.*;
4.  public class Postfix
5.  {
6.      public static void main(String[] args)
7.      {
8.          System.out.println("Postfix  -->  Evaluate");
9.          ArrayList<String> postExp = new ArrayList<String>();
10.         /*  enter tests here  */
11.         postExp.add("345*+");
12.         postExp.add("34*5+");
13.         postExp.add("45+53*-");
14.         postExp.add("34+56+*");
15.         postExp.add("345+*2-5/");
16.         postExp.add("812*+93/-");
17.
18.
19.         for( String pf : postExp )
20.         {
21.             System.out.println(pf + "\t\t" + eval(pf));
22.         }
23.     }
24.     public static int eval(String postfix)
25.     {
26.         Stack<String> stack = new Stack<String>();
27.         for(char ch: postfix.toCharArray())
28.         {
29.             if(isOperator(ch))
30.                 stack.push(eval(Integer.parseInt(stack.pop()),Integer.parseInt(stack.pop()),ch)+"");
31.             else
32.                 stack.push(ch+"");
33.         }
34.         return Integer.parseInt(stack.pop());
35.     }
36.     public static int eval(int a, int b, char ch)
37.     {
38.         if(ch=='+')
39.             return a+b;
40.         else if(ch=='-')
41.             return b-a;
42.         else if(ch=='*')
43.             return a*b;
44.         else
45.             return b/a;
46.     }
47.     public static boolean isOperator(char ch)
48.     {
49.         if("+-*/".indexOf(ch)!=-1)
50.             return true;
```

```
51.        else
52.            return false;
53.    }
54. }
55.
56. /*
57.   Postfix  -->  Evaluate
58.   345*+        23
59.   34*5+        17
60.   45+53*-      -6
61.   34+56+*      77
62.   345+*2-5/     5
63.   812*+93/-     7
64. */
```