Develop bracket matching source code which can match ( ), [ ], { }, and < > from input string using stack. (There are << and >> operators in the input string which are not counted as bracket.)

Input: a line of string (whitespace can be entered into the input.)

Output: there are 2 cases,

1) If brackets are matched, the result "matched" will be shown in the console.

2) If bracket is not matched, a 2-line result will be shown.

"Not matched" will be shown on the 1st line.

The 2nd line shows the number of matched brackets before not matched bracket will be shown following by "matched".

Input	Output
(((20+5)+61	Not matched 1 matched
(20+[30 – 40<int> + 50]- a[40]{})	5 matched
>20(30{40[20]})<	Not matched 0 matched
<<a+<int>b+c[40-{50+60(20)}]-<int>+b>>	5 matched
a+b-<<c+d<< -f ({d[30]})>>	3 matched