This is from VOP F17 Lesson 7.

**Opgaver i klassen:**

1. *Match’ene Parenteser:* Udfyld den manglende kode i [*matching\_brackets\_exercise. MatchingBrackets.java*](https://e-learn.sdu.dk/bbcswebdav/pid-4790120-dt-content-rid-7539356_2/xid-7539356_2)*.* Hint: Følg algoritmen:

To see whether an expression of the form “–{ [b ⋅ b – (4 ⋅ a ⋅ c ) ] / (2 ⋅ a) }” is correctly formed, place the parentheses on a *Stack<Character>*:

When you see an opening parenthesis, push it on the stack.

When you see a closing parenthesis, pop the stack.

If the opening and closing parentheses don’t match

The parentheses are unbalanced. Exit.

If at the end the stack is empty

The parentheses are balanced.

Else The parentheses are not balanced.

1. Med udgangspunkt i ovenstående:

* Benyt en implementation at List<Character> i stedet for en Stack. push() og pop() skal arbejde på begyndelsen af listen.
* Implementer main()-metoden, så der indlæses en java-fil i stedet for input fra keyboard. Fx:

public static void main(String[] args) {

MatchingBracketsWithList pc = new MatchingBracketsWithList();

try (Scanner in = new Scanner(new File("DanishTown.java"))){

StringBuilder expression = new StringBuilder();

while(in.hasNextLine()){

expression.append(in.nextLine());

}

pc.ckeckBrackets(expression.toString());

} catch (FileNotFoundException ex) {

Ex.printStackTrace();

}

}