

CSC207H: Exercise 4

Due date: 10:00 a.m., Monday, November 24, 2008.

What to do for this exercise

1. Create a two-line file "ex4" that contains the regular expressions specified below.
2. Check ex4 into your repository in the e4 subdirectory of exercises.

Specifications for ex4

Each line of ex4 is a separate regular expression. It should be entered as just a string, without quotation marks. Your regular expressions will be *read* by a program, but they are not *part of* a program. Hence they do not need double backslashes to represent the special characters such as spaces and digits.

Here is what the two regular expressions must do:

1. The regular expression in the first line of ex4 must match strings beginning with ten digits (Think of it as a student number.), followed by two spaces, followed by a name in the Scots-Irish style: beginning with "Mc" or "Mac", followed by an upper-case letter, followed by one or more lower-case letters, followed by a tab character. There might be more characters in the line after that, but we're not interested in them.
2. The regular expression in the second line of ex4 must match strings containing exactly three commas. This means that the entire string, from beginning to end, must contain no more and no fewer than three commas. There may be any number of non-comma characters anywhere in the string. Additionally, group 2 of your regular expression must contain the characters separating the first and second commas. Of course this could just be an empty string.

Your regular expressions will be tested using Java by compiling the expression into a `Pattern`, creating a `Matcher` and calling `matches()`.

You will get one mark for each regular expression that works, so unlike most exercises, this one allows you to have a mark of 1 (as well as 2 and 0). You will get a 0 if your ex4 file does not contain exactly 2 lines.