Lab 11

Instructions: Complete the steps below. Be sure to show your code to one of the lab TAs before you leave, so that you can receive credit for this lab. You must also upload a copy of all your source code (.java) files to the link on Blackboard by **11:59 PM on Monday October 12, 2020 for L01, L02, L03, L05 and by 11:59 PM on Tuesday October 6, 2020 for L06, L07, L08 and L09**.

1. Write a method that finds the number of occurrences of a specified character in a string using the following header:
   public static int count(String str, char a)
   For example, count("Welcome", 'e') returns 2. Write a test program (or main method) that prompts the user to enter a string followed by a character then displays the number of occurrences of the character in the string.

2. Write a method to compute the following summation:
$$m(i) = \frac{1}{2} + \frac{2}{3} + \cdots + \frac{i}{i+1}$$
   Write a test program (or main method) that displays the following table:

i	m(i)
1	0.5000
2	1.1667
…	
19	16.4023
20	17.3546

   Grading Guidelines: This lab is graded on a scale of 0-6 points, assigned as follows:
   - **0 points:** Student is absent or does not appear to have completed any work for the lab
   - **2 point (2*1):** Student has written the program, but it has errors.
   - **4 points (2*2):** Student has written the program it compiles without error, but it does not produce the correct output.
   - **6 points (2*3):** Student has written the program and it compiles and runs correctly, without any errors.