

6. For the following table that shows the variables of the code. Do the calculations **by hand** in the table below and write the values in the worksheet.

i	j	x	y	x / y	i / j	i % j
4	1	4.0	1.0	4.0	4	0
4	2	4.0	2.0	2.0	2	0
4	3	4.0	3.0	1.33	1	1
4	4	4.0	4.0	1	1	0
4	5	4.0	5.0	0.8	0	8
4	6	4.0	6.0	0.66	0	6
4	7	4.0	7.0	0.571428	0	7
4	8	4.0	8.0	0.5	0	8
4	9	4.0	9.0	0.44	0	9

$4/1 = 4$ $4/1 = 4$
 $4/2 = 2$ $4/2 = 2$
 $4/3 = 1 \text{ R } 1$
 $4/4 = 1$
 $4/5 = 0.8$
 $4/6 = 0.66$
 $4/7 = 0.571428$
 $4/8$
 $4/9$

7. Test if your calculations of the previous step are correct. By modifying the output statements(System.out) in the source program of class Lab4, according to the table, for int variables i and j, and double variables x and y (Hint: To speed things up, either do all of the values at once, or add an input statement that allows you to enter the values for i, j, x and y from the keyboard):

8. Fill out the following in the worksheet: Suppose that ABCD are the 4 digits of an integer value. With or without the computer, give the values of the following expressions in terms of A, B, C and D:

$ABCD / 1 = \underline{1234}$	$ABCD \% 1 = \underline{0}$
$ABCD / 10 = \underline{123}$	$ABCD \% 10 = \underline{4}$
$ABCD / 100 = \underline{12}$	$ABCD \% 100 = \underline{34}$
$ABCD / 1000 = \underline{1}$	$ABCD \% 1000 = \underline{234}$

$ABCD = 1234$