WORKSHEET 04A – In class on week 2 day 1

Implement a class from scratch: `CashRegister`

1	**Design**: This class represents the transactions when ONE customer buys & pays for a number of items in the store a) Characteristics (which will be fields): _____ Also: dollar values of a quarter, dime, nickel, penny b) Behaviors (which will be methods): _____	
	Study these two files *The instructions are in 3-4 if you were to do create the 2 files from scratch. To save time, the files are given to you in 2. So study them. You may use the debugger to **step (into)** through the whole program, and identify the types & scopes of variables (fields, local variables, parameters) and inspect their values along the way.*	
2	**Download `CashRegister` and `CashRegisterTester`** (same as in textbook, p. 134)	
3	**Study `CashRegister`:** a) Note the 3 parts: o Fields – see characteristics o Constructors – to initialize fields o Methods – see behaviors b) Switch to "Documentation" (i.e., with javadoc tool) to see its APIs c) Experiment by changing the descriptions after the @ tags in the source file, and seeing the changes in the	
4	**Test `CashRegister`:** ***Hint**: the structure is similar to BankAccountTester* a) Create a **`CashRegister`** object b) Write one statement to record each of several items to be bought c) Write a statement to record when the customer gives the money to pay d) Write a statement to ask for the change to be given to the customer, along with your expected value e) Do another set of statements as in steps b-d, for another customer f) Try with different purchase and payment amounts, verifying the change amount each time g) Look at the APIs of this class	
5	• View pair programming – about 10 mins https://www.youtube.com/watch?v=rG_U12uqRhE&t=25s • Do pair programming for the following problems, switching every 10 minutes. If not completed in class, continue as HW.	

6	**Do E 4.4** ***Note***: If necessary, consult the `Conversation` class for prompting for user inputs. ***Hint***: Need to prompt for 2 `int`s here. ***Reminder***: Don't just display the numeric results; do provide the meaning by including the label for each number. Email/copy the program from the driver's computer to the other, so both students can study from it. Submit online. .	
7	**Do E 4.5** ***Hint***: Use **printf** to format nicely Email/copy the program from the driver's computer to the other, so both students can study from it. Submit online. .	
8	***Reminder***: Share in online Discussion.	

THE END