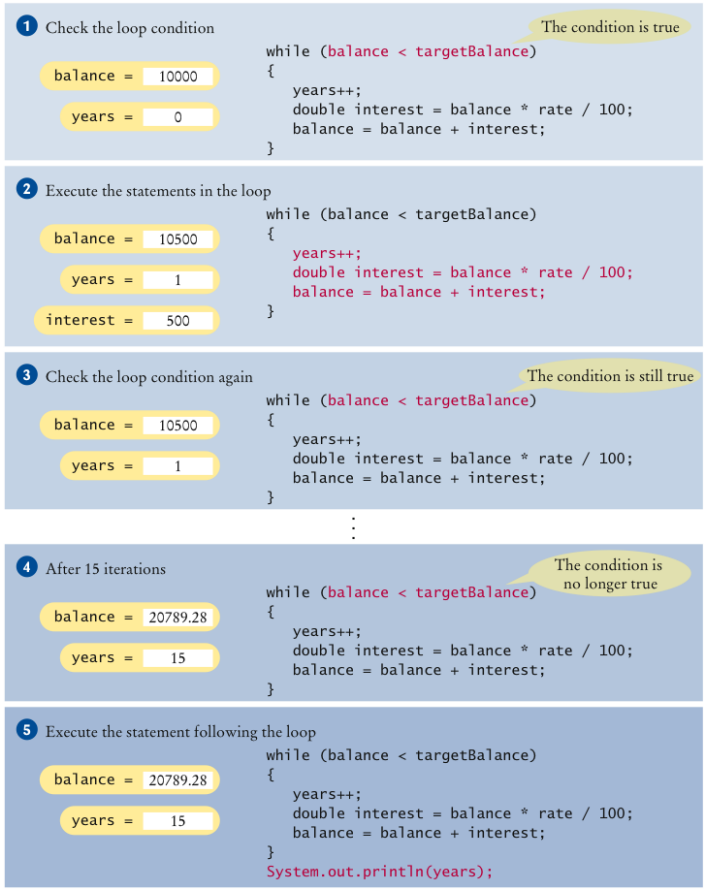
WORKSHEET 06A – In class on week 3 day 1

1

`Investment`: Write a console program to use ***while loop***:

This class is to keep the balance of an investment and estimate the number of years a target to be reached

- Download to your project the **`Investment.java`** and **`InvestmentRunner.java`** files
- Run **`InvestmentRunner`** to be familiar with the program
- Study the source code – ***Reminder***:
  - 3 main parts a class (**`Investment`**): fields aka instance variables, constructors, methods
  - using a class (in **`InvestmentRunner`**): create an object by declaring it with the class and calling the constructor, then "ask" the object to do things by calling methods of the class
- Use the debugger:
  - Before the run, set 2 breakpoints:
    - in **`InvestmentRunner`**, ***after*** object `invest` is created (to observe its contents during the run)
    - in **`Investment`**, in method `waitForBalance`, at the beginning of the loop (to observe the changes of values during the run)
  - Run **`InvestmentRunner`**, and click "Continue" in the Debugger when you want to go until the next breakpoint stop:
    - At the 1st breakpoint, what are the values of the fields in object `invest`?
    - At the 2nd breakpoint, when field `years` is 0, what is the value of local variable `curBal`?
    - Same question as above, when field `years` is 1, 2, 5, 7?
- Clear all breakpoints
- Change the initial amount and/or interest rate in **`InvestmentRunner`**, and run again a few times to "play" around.



	Do pair programming for the following problems, switching every 7 minutes.		

2	Do the following programing exercises, as follows:
	• Go to the link
	• Do work in BlueJ
	• Submit your work in codecheck
	• Save the result of your submission, which includes your work and "Scores" & value (which should be 100%) by doing the following:
	  ○ "Print screen", or copy the screen with the Snipping Tool
	  ○ Save it to a Word file
	  ○ Save the text from your source file for your own use
	• Submit the Word file (with ***all*** results you save in the previous step) & show on the screen in class
	
	• **EvenSum**: http://codecheck.it/codecheck/files?repo=bj4cc&problem=ch06/c06_exp_6_102
	  Hint: use % to check whether an integer is even
	• **Format phone number**: http://codecheck.it/codecheck/files?repo=bj4cc&problem=ch06/c06_exp_6_106		

	• Copy the source code from each other to keep – each student must have the working code. • Submit online.		

THE END