Day 6:

**Exercise 1: Help Bart**

a. Create a new project: HelpBart. Add a new class: HelpBart. Delete old code and enter this code:

public class HelpBart

{

public static void main(String[] args)

{

int count = 1;

while (count <=100)

{

System.out.println("I will not do anything bad ever again.");

count = count +1;

}

}

}

b. (Clear your terminal: View -> Show Terminal -> Options -> Clear) His teacher, Mrs. Krabapple, does not want to count the sentences. Change the print statement to print: “Sentence ”+ count + “: I will not do anything bad ever again." in a single print statement. Note: the count variable for the sentence number and that we connect everything with a plus (+).

c. (Clear again!) Mrs. Krabapple didn’t want to stay late waiting for him to finish and only asked for 10 sentences. Change the code.

d. (Clear again!) How can you have Bart count by two’s? Change the code. Do the sentence numbers have the pattern: 2, 4, 6…?

e. (Clear!) Have him count backwards (by 1’s) from 10. First, change count to start at 10. Try this. (Don’t forget how to stop things if they get crazy!) Now change the code in the condition for while to stop the infinite loop.

f. Stop working & listen to learn about for loops. Now, change HelpBart to use a for-loop.

**Exercise 2: Play with for loops**

a. Create a new project: PlayForLoop. Add a new class: PlayForLoop. Delete the code and use (a) to start your work.

b. Implement the sample loops projected on the screen. Use System.out.println (i); to check the values.

c. Stop before the last example for a String review.

**Exercise 3: Saving Account Calculator**

a. Download SavingsAccount. Write the first line of the for loop to print the balance each year for 20 years.

b. Notice that you need to change the output so that you print dollars and cents. Add and remove comments to change the formatting to print a table with the correct decimal places.

c. Change the code to print 10 years of information.

d. Change the interest rate to 12%. Compare the balances after 10 years: 7%:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ vs. 12% \_\_\_\_\_\_\_\_\_\_\_

e. Optional: Change the code to create two balances to compare the balance with two interest rates.