Lecture Notes, Monday & Wednesday (9/20/21 - 9/22/21)

- We may take a sheet of notes 8 x 11 handwritten, can be both sides. We turn in it with the exam.

- We can declare num in the while loop because we wont be using it outside of the loop.

- While loops: What steps should be repeated? What is the stopping condition?

- Partial loops: do they go before or after the loop itself?

- We do not want to count the sentinel value as part of the process. It should not factor into the output of the loop.

Scanner kb = new Scanner(System.in);

Final int STOP = -99;

Int total = 0;

System.out.print(“Enter payroll amount, (enter -99 to stop): “);

Int payAmount = kb.nextInt();

While (payAmount != STOP)

{

Total = payAmount + total;

System.out.print(“Enter payroll amount, “

+ “(enter -99 to stop): “);

payAmount = kb.nextInt();

}

System.out.println(“Total: “);

1000

2000

500

-99

After the payAmount is read, it goes to the while loop condition. This is done because when it’s at the beginning, outside the while loop, the sentinel value is NOT added to the total amount. Or it is not processed through the loop. It just closes the loop. That’s why it’s at the beginning of the while loop condition.

Don’t write clunky code.

Rewatch the while loop video.

Write code to add the numbers 1 to 10 and return the sum using a while loop.

Int I = 1;

Int sum = 0;

While ( I <= 10)

{

Sum = sum + I;

I++;

}

S.o.pln(“Sum”);

- Debugger Quiz: Show the lab advisor

How to set a breakpoint, step through the code, show where and when the values change.

- Volatile constructor: empty constructor.

- We would use a for loop if we know how many iterations we will evaluate. These types of loops are referred to as COUNTING LOOPS.

- For loops: The initialization (first argument), condition to check if it evaluates to true (second argument), then the loop body is executed. THEN we go back to the last argument of the for loop which is executed at the very end.