**EECE.2160: ECE Application Programming**

# Fall 2016

# Lecture 12: Key Questions

# October 3, 2016

1. Review: Discuss input validation and iterative algorithms.
2. In what cases are for loops useful? Describe the basic structure of a for loop.
3. Describe the operators that allow you to directly modify a variable without writing a full assignment statement.
4. Explain the difference between pre- and post-increment or decrement operators.
5. **Example:** What does the following program print?

int n = 5;

printf("n = %d\n", ++n);

printf("Now, n = %d\n", n++);

printf("Finally, n = %d\n", n);

1. **Example:** What does each of the following print?
2. for (i = 5; i < 40; i += 8)  
   {  
    printf("%d ", i);  
   }
3. for (i = -5; i < -10; i--)  
   {  
    printf("%d ", i);  
   }
4. for (i = 10; i <= 100; i = i+10)  
   {  
    if (i % 20)  
    printf("%d ", i);  
   }
5. for (i = 5; i < 10; i += i%2)  
   {  
    printf("%d ", i++);  
   }

Finishing PE2:

**Flowchart/code for 2n**

**Flowchart/code for n!**