EECE.2160: ECE Application Programming
Spring 2017

Lecture 11: Key Questions
February 10, 2017

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);
```

6. **Example:** What does each of the following print?
a. ```
for (i = 5; i < 40; i += 8)
   {
       printf("%d ", i);
   }
```

b. ```
for (i = -5; i < -10; i--)
   {
     printf("%d ", i);
   }
```

c. ```
for (i = 10; i <= 100; i = i+10)
   {
       if (i % 20)
           printf("%d ", i);
   }
```

d. ```
for (i = 5; i < 10; i += i%2)
   {
     printf("%d ", i++);
   }
```

Finishing PE2:
Flowchart/code for 2^n

Flowchart/code for n!