

16.216: ECE Application Programming

Spring 2012

Lecture 11: Key Questions February 15, 2012

1. Explain the basic form of an `if` statement.
2. Describe how the expression in `if (<expression>)` is evaluated and show how conditions are evaluated, including multiple conditions in the same expression.

3. Describe how the statement—the actual code to be executed if the condition is true—is written for an `if` statement.

4. Show how multiple if statements can be nested together (`if/else if/else`).

5. **Example:** What does the following code print?

```
int main() {
    int x = 3;
    int y = 7;

    if (x > 2)
        x = x - 2;
    else
        x = x + 2;

    if ((y % 2) == 1)
    {
        y = -x;
        if ((x != 0) && (y != -1))
            y = 0;
    }
    printf("x = %d, y = %d\n", x, y);
    return 0;
}
```