16.216: ECE Application Programming
Fall 2014

Lecture 14: Key Questions
October 8, 2014

1. **Example:** What does the following program print?

```c
#include <stdio.h>

int f(int a, int b);                // Function prototype

int main() {
    int x = 1;
    int y = 2;
    int result1, result2, result3;

    result1 = f(x, y);
    result2 = f(y, result1);
    result3 = f(result1, result2);

    printf("x = %d, y = %d\n", x, y);
    printf("Result 1: %d\n", result1);
    printf("Result 2: %d\n", result2);
    printf("Result 3: %d\n", result3);

    return 0;
}

int f(int a, int b)           // Function definition
{
    int i;                    // Loop index
    int r = 0;                // Result

    for (i = 0; i < a; i++)
        r += b;

    return r;
}
```