**ETEC2110 Homework 2 Points: 20**

1. Complete the non-shaded squares in this table (you can list them below if it’s too hard to fit into the box squares). I fully know you can do this on a programming calculator, but I’d encourage you to do it pencil-and-paper because that’s how you’ll see it on the midterm and final.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Value to Convert | As Integer (indicate smallest, most appropriate C type to hold, including whether it’s signed or not) | As binary | As hexadecimal | As octal |
| 237 | Unsigned | B11101101 | 0xED | 0355 |
| -95 | Signed | B0100001 | 0x21 | 0041 |
| 83469 | Unsigned | B10100011000001101 | 0x1460D | 0243015 |
| b1011 0110 | 182, Unsigned |  | 0xB6 | 0266 |
| B1001 0100 1011 0111 | 76215 |  | 0x129B7 | 0224667 |
| 0xF739751C | 4147737884, Unsigned | B11110111001110010111010100011100 |  | 036716272434 |
| ‘C’ | 12, Unsigned | B1100 | 0xC | 014 |

Note: The next-to-last item is kind of long. I probably wouldn’t ask you this on an exam, but on homework, it’s fair game😊

1. Write a complete C program that asks the user for the width and height of a box (in feet) and outputs the area of the box, with some explanatory text. You can assume that the user will enter a valid integer (not a floating point, or decimal value, or a string). If you can fix this naivete, it might be worth a few bonus points…