CS 100 Fall 2015
Homework 3
"numbers"

Due Tuesday 6 October. Submit by midnight
Electronic submission to the CS portal for CS100: http://www.cs.uky.edu/csportal

Overview
This assignment is a response to the "Computer Science Magic" lecture, where you will practice converting some numbers and answering a few questions. For this assignment you will turn in one item [your problem solutions] to the CS portal:

> https://www.cs.uky.edu/csportal

Details
Answer the following questions, and show your work.
1. Convert the following decimal numbers to binary:
   - 63
   - 42
   - 1001 (decimal)
   - 255
   - 118902

2. Convert the following binary numbers to decimal:
   - 1111001
   - 101110
   - 1100110011001

3. Answer the following questions:
   - What is the ASCII value for the capital letter 'B'?
   - If I wanted to write the Greek uppercase letters of my sorority (Alpha Chi Omega) in Unicode, what would I write?
   - Assume the following sequence (in decimal) is ASCII and that each value is shifted DOWN by some integer amount (same amount for all values). Decode the message:

```
80 94 25 58 107 94 25 80 98 101 93 92 90 109 108 26
```

Turning in your Work
No matter how you decide to write up your answers (by hand with pen and paper, word document, etc) please create a *pdf* file representing your "camera-ready" results. Please submit this (and only this) as your submission for this assignment.   Upload your single *pdf* file via the CS portal for this class (link on the class website) before midnight on the due date.