Day 7 Highlights

1. Reminders
   1. Project 1 is due today at 5pm
   2. Project 2 is to be posted Monday
   3. zyBooks Chapter 3 is due Monday at midnight
   4. No office hours today
2. Character (8-bit integer) variables
   1. Holds a single character (think of it as a key on the keyboard)
   2. Show the ASCII table (how values are stored)
   3. Can manipulate characters (limited arithmetic operations)

**#include <stdio.h>**

**int main(void) {**

**char a = 'I', b = 'B', c = 'M';**

**printf("%c %c %c\n", a, b, c);**

**printf("%c %c %c\n", a-1, b+1, c+32);**

**return 0;**

**}**

* 1. Show printing a character with **"%c"** and **"%d"**
  2. Character related types: **#include <ctype.h>**
  3. Read characters with **"%c"** or **" %c"** (skips white space)

1. Arrays of characters (strings)
   1. Note: covering arrays in much greater detail in two weeks
   2. Defining strings

**char str[] = "Crimson Tide"; // allocates space**

**char str2[10]; // holds ten characters**

**char str3[100] = "Roll Tide";**

* 1. All strings end with a NULL character **'\0'**
  2. String output uses **%s**
  3. String input uses **%s** but does not need **&** (learn why later)
  4. String comparisons use **strcmp**
  5. Lots of built-in string functions **#include <string.h>**

1. Quiz