CS16, 10S, **H19**, due **Mon Lecture 05.10**—Even More on Structs (handout)—Total Points: 50
Available online as http://www.cs.ucsb.edu/~pconrad/cs16/10S/homework/H19—printable PDF

Name: (4 pts) _____ Umail Address: (4 pts) _____ @umail.ucsb.edu

Lab Section (2 pts)—circle one: 9am 10am 11am noon unknown

(Note: For now, circle the lab section you are registered for on GOLD. If you need to request attendance at a different lab section because of an ACTUAL SCHEDULE CONFLICT, please email pconrad@cs.ucsb.edu with details)

This assignment is due **IN Lecture on Monday, 05.10.**
It may ONLY be submitted Lecture, in Chem 1171 at 1pm on Monday.
You must come IN PERSON to turn it in during your assigned Lecture section.

Late Policy: No email submission allowed—and don't "slip it under my door". If you need to make it up, you must do so during office hours, or make an appointment to see me, and you must request this appointment within 48 hours of when the assignment was originally due.

Personal Day/Sick Day policy: Everyone is permitted one "personal day/sick day" when you get to make up a missed homework assignment for free during office hours or via appointment. After that, you may not make up the homework assignment—you can only earn back the points through extra credit opportunities.

(For more details, see the syllabus and the homework policy)

For this homework, the preparation is material on the following handout:
http://www.cs.ucsb.edu/~pconrad/cs16/10S/homework/H19/handout (pdf link)

Be sure to read not only the main text on the handout,
but also the little boxes off to the side, like the one see to the right of this sentence.

Once you've read that handout, write answers to the questions on this sheet (use the PDF link to print a copy of this if you weren't in class).

The little boxes on the handout—boxes like this one—also have important information you may need to complete the assignment.

1. (10 pts) The `struct WorkWeek` declaration in the box at the right is an abstraction of a work week for someone making an hourly wage. The struct definition is accompanied by some function prototypes.

   Write a line of code (or lines of code) that declare a variable `thisWeek` of type `struct WorkWeek`, and initialize with values representing this real world situation:

hours worked	8 on Monday, 4 on Tuesday, 0 on Wednesday, 4 on Thursday, 8 on Friday, 0 on Saturday, 0 on Sunday.
employee number	2493829
the week starts on	May 3rd, 2010

```
struct Date
{
  int m; // month, 1-12
  int d; // day, 1-31
  int y; // year, 4 digits (e.g. 2010)
};

struct WorkWeek
{
   int hrsWorked[y]; // for each day, mon-sun
   int empNum;
   struct Date weekStarting; // day of Monday

};
```

Please turn over for more...

...continued from other side

2. The `struct WorkWeek` declaration in the box at the right repeats the one from the other side of the page. The struct definition is accompanied by some function prototypes.

```
struct WorkWeek
{
   int hrsWorked[y]; // for each day, mon-sun
   int empNum;
   struct Date weekStarting; // day of Monday

};


// initialize a work week
// sets employee number and weekStarting,
// but initializes all hours worked to 0
void initWorkWeek(struct WorkWeek *ww,
                  int employeeNum,
                  int m, int d, int y);


// return the total of all the hrsWorked
int totalHours(struct WorkWeek ww);
```

   a. (10 pts) Suppose you have the following variable declarations:

      `struct WorkWeek nextWeek;`

      Write a function call to the initWorkWeek function that initializes that value with employee number 1234567 and the date 05/10/2010.

      (Note that initWorkWeek sets all hours to zero.)

   b. (10 pts) Now, write the function definition for `initWorkWeek`

   c. (10 pts) Write the function definition for `hrsWorked`

End of H19