Instructor: Professor Neena Kaushik

Office hours (in AT 203): Mondays: 3:15 to 4:15 p.m.
   Wednesdays: 10 to 11 a.m.
   and by appointment

Email: kaushikneena@fhda.edu

Course website: http://www.deanza.edu/faculty/kaushikneena

Lecture: 12:30 - 2:10 p.m. in AT 312 (1:30 – 1:35 p.m. break) (Mondays & Wednesdays)

Lab: 2:15 - 2:40 p.m. in AT 312 (Mondays & Wednesdays)

Assignment due date: November 12

<table>
<thead>
<tr>
<th>Part</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program works correctly</td>
<td>25</td>
</tr>
<tr>
<td>*If program does not work as per specifications, you may get 0 points</td>
<td></td>
</tr>
<tr>
<td>Output with three test cases</td>
<td>25</td>
</tr>
<tr>
<td>Comments and variable names properly used</td>
<td>20</td>
</tr>
<tr>
<td>Header</td>
<td>20</td>
</tr>
<tr>
<td>Program and output sheets are stapled properly</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

1) Please submit your program in hard copy along with the output
2) Please use comments in your program. Please name the variables so that they indicate what the variable does in the program. A maximum of 20 points will be deducted if variable names and comments are not used properly.
3) Please include the following header in your program. A maximum 20 points will be deducted for the header not being present in the program.

/***********************************************************/
** Program written by: Your name
** Inputs:  List the inputs to the program
** Outputs: List the outputs from the program
** What the program does: Say what the program does
/**************************************************************/
ASSIGNMENT 7

Write a C program which reverses any number which is entered from the keyboard

1) You have to use a function which reads the number first.
2) You have to use a function which reverses the number.
3) The main program should call both these functions. It should first print the number and then the reversed number.
4) You have to use a while loop.

<table>
<thead>
<tr>
<th>Function prototype</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 int read_number(void)</td>
<td>Upward</td>
</tr>
<tr>
<td>2 int reverse_number(int number)</td>
<td>Downward and via return</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How to call the functions from main</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 number = read_number();</td>
<td>number contains the number to be reversed</td>
</tr>
</tbody>
</table>
| 2 new_number = reverse_number(number);   | 1) Pass number via downward communication  
|                                           | 2) After the function call, new_number contains the reversed number |
EXAMPLES:

1)  
   **INPUT**  
   34  
   **OUTPUT**  
   The number that you entered is 34  
   The reversed number is 43

2)  
   **INPUT**  
   9876  
   **OUTPUT**  
   The number that you entered is 9876  
   The reversed number is 6789

3)  
   **INPUT**  
   21111  
   **OUTPUT**  
   The number that you entered is 21111  
   The reversed number is 11112