CS 159 – HW #04
5 Points Possible - Due: March 5, 2012 at 11:00pm.

Problem: Given the amount to borrow for a given loan in addition to the annual interest rate and term in years display the corresponding monthly amortization table (including every payment for the loan).

Example Execution:

```
Enter the amount to borrow: 5000
Enter the annual interest rate: 11
Enter the term of the loan in years: 1

Month    Old      Monthly  Interest  Principal    New
       Balance  Payment    Paid      Paid     Balance
  1    5000.00   441.91     45.83     396.07  4603.92
  2    4603.92   441.91     42.20     399.71  4204.22
  3    4204.22   441.91     38.54     403.37  3800.85
  4    3800.85   441.91     34.84     407.07  3393.78
  5    3393.78   441.91     31.11     410.80  2982.98
  6    2982.98   441.91     27.34     414.56  2568.42
  7    2568.42   441.91     23.54     418.36  2150.06
  8    2150.06   441.91     19.71     422.20  1727.86
  9    1727.86   441.91     15.84     426.07  1301.79
 10    1301.79   441.91     11.93     429.98   871.81
 11     871.81   441.91      7.99     433.92   437.89
 12     437.89   441.91      4.01     437.89     0.00
```

Additional Very Important Requirements and Reminders:

- Accept the input of three values (two floating-points and one integer for the term) and produce output formatted **exactly** as seen in the example executions above.
  - You may assume the user will always enter meaningful data when testing your program.
  - Use width and precision modifier values to align the output as expected. Do not make use of tabs or excessive spacing when printing the numbers in the table above.
  - Do not add any "bonus" features not demonstrated in the example executions provided.
- **DO NOT** use any material found outside of the first SIX chapters of the C text.
  - **You MAY make use of selection AND repetition for this assignment, but no arrays!**
- Additionally, **this assignment MUST make good use of user-defined functions to be considered for partial credit.**
- A program **MUST** compile to be considered for partial credit. The submission script will reject the submission of any file that does not compile and is therefore untestable.

Academic Integrity Reminder:

- Please review the official policies and consequences of the course as they relate to academic integrity. The assignment you submit should be your own original work. You should be consulting only course staff regarding your specific algorithm for assistance. Collaboration is not permitted on individual homework assignments.

Course Programming and Documentation Standards Reminders:

- Details regarding the course expectation of user-defined function use and documentation can be found in the standards document and chapter 4 notes.
- Select meaningful identifiers (names) for all variables and symbolic/defined constants in your program.
- Indent all code found within the `main` function **exactly** two spaces.
  - All code found within a selection or repetition construct will be indented exactly two additional spaces.

When you submit... only the last attempt of a submission is kept for grading. All other submissions are over-written and cannot be recovered. You may make multiple submissions but only the last attempt is retained and graded.

- Verify in the e-mail sent to you by the course that you have submitted the correct file, to the correct assignment (`hw04`), and to the correct lab section. Forwarding confirmation e-mails from Purdue to external e-mail services may result in the mail being undelivered or end up being identified as spam.
- Leave time prior to the due date to seek assistance should you experience difficulties completing or submitting this assignment.
- All attempts to submit via a method other than through the sage server as set up during the first week of the semester will be denied consideration. Leave time to seek assistance should you struggle to use any of the tools of the course.

Assignment deadlines... are firm and the electronic submission will disable promptly as advertised. We can only grade what you submit as expected prior to the assignment deadline.

All course programming and documentation standards are in effect for this and each assignment this semester. Please review this document in your course notes packet.
