Suppose you are borrowing $300,000 from a bank to buy a house, and suppose the bank is charging 6.0% interest. In addition, suppose you intend to pay off the loan in 20 years.

1. Compute the monthly payment \( M \). Use the ROUND function to round-off this value to two decimal places.

2. Create an amortization able which shows:
   - the interest that you paid each month.
   - the amount paid toward the principal each month.
   - the current balance.

3. Use the numbers on your spreadsheet to answer the following:
   - (a) What percentage of the loan is paid during the first year?
   - (b) What percentage of the loan is paid during the second year?
   - (c) Explain why a larger percentage of the loan is paid off during the second year than the first year.
   - (d) How long does it take to pay off half of the loan?

Type your answers to the above questions in Microsoft Word.

Turn in the following items:
   - A printout of the Excel worksheet.
   - A printout of the answers to the above questions.
   - Send a copy of your Excel (xls) file to Norbert Kaula at nkaula@cs.du.edu.

**Due Date - Tuesday, March 9**

The project is worth 100 points. For each day the project is late, the score is reduced by 10 points.

**Honors Policy**

- This project must be your own work. Do not copy any part of this project from another student’s work.
- Do not work on the project with other students.
• It is permissible to ask another student to clarify the goal of a project. It is also permissible to ask another student about the form or operation of an HTML statement, as long as the discussion does not refer directly to the project. For example, while it is permissible to ask another student what the h1 tag does, it is not permissible to ask how to use the h1 tag in a project.

• If you are having problems with the project, contact Professor Cohen or Mr. Kaula.

• A statement of the University’s honors policy is at the web site:

   http://www.du.edu/honorcode