You work for a company that owns five apartment complexes in Colorado. The owners need some statistical information about the occupancies at the different complexes and specific information about rentals by apartment size (e.g., number of bedrooms per apartment). The owners are also considering purchasing a sixth apartment complex and need you to perform some financial calculations and analyses.

**Apartment Unit Statistics**
The owners decided that unoccupied units should be remodeled if the last remodel took place before 2005. In addition, you need to identify the number of total units, number of occupied units, and occupancy rates by apartment complex. Other needed statistics include rankings, total potential rent, actual rent collected, and percentage of total rent. Use relative and mixed cell references correctly in all formulas and functions. Avoid absolute cell references to keep formulas shorter and easier to read.

a. Open e07clapartment, and then save it as e07clapartment_LastnameFirstname.
b. Enter a nested function in the Recommendation column to indicate Need to remodel if the apartment is unoccupied and was last remodeled before 2005. For all other apartments, display No change.
c. Insert functions in the Total Units and Occupied Units columns to calculate the number of apartments and number of occupied apartments by apartment complex.
d. Calculate the occupancy rate and rank based on occupancy rate where the highest occupied complex is 1.
e. Insert the appropriate functions to calculate the potential rent (i.e., the total rent if all units at a complex were rented) and the actual amount of total rent by complex for occupied units.
f. Calculate the percentage of potential rent that is actually collected this month.
g. Insert functions in the range F15:F18 to calculate the total rent collected by apartment size (i.e., number of bedrooms) and total rent collected. The value in cell F18 should be identical to the total in cell G12.

**Create a Search**
The owners would like to be able to perform a simple search by ranking to identify which apartment complex is at that ranking.

a. Type 4 in cell B2. This is the cell in which the owners will enter a ranking.
b. Insert a nested lookup function in cell B3 that will look up the ranking entered in cell B2 and return the respective apartment complex. Make sure the sample ranking of 4 returns the correct apartment complex indicated in the Summary Statistics area.
c. Type 1 in cell B2 to make sure the correct apartment complex name appears.

**Manage a Database List**
The Database worksheet contains an identical list of apartments. One of the owners wants to know how many two- and three-bedroom apartments should be remodeled, the value of lost rent, and the year of the oldest remodel on those units. You need to perform an advanced filter and enter some database functions to address the owner's concerns.

a. Click the Database worksheet tab.
b. Enter conditions in the Criteria Range for unoccupied two- and three-bedroom apartments that need to be remodeled.
c. Perform an advanced filter based on the criteria range. Filter the existing database in place.
d. Enter database functions to calculate the database statistics in the range C8:C10.

**Loan Amortization**
The owners are considering purchasing a sixth apartment complex for $850,000 with a down payment of $375,000 for 30 years at 5.75% with the first payment due on March 20, 2012. You need to perform internal calculations and build a loan amortization table.

a. Click the Loan worksheet tab.
b. Enter the loan parameters in the Input Area, and then insert formulas to perform calculations in the Summary Calculations.
c. Complete the loan amortization table. Use a date function for the payment date column and financial functions for the interest paid and principal payment columns.
d. Create a footer with your name on the left side, the sheet name code in the center, and the file name code on the right side of each worksheet. Adjust page setup options as needed.
e. Save and close the workbook, and submit based on your instructor's directions.