1) Prove the old saying that if you start with a penny and double it every day, that by the end of a month of 30 days you will be a millionaire. You need to use a For/Next loop for this problem. You do not need to turn in an algorithm with this one, just the source code and output.

2) This problem will redo problem #5 from homework #4, which stated; a problem that lets the user enter any positive integer, but you do not have to check for this, and then determines the number of digits in that integer. For example, if user enters 14503, the out would say 5 digits. This time you must use a function that will return back to “Main” the number of digits. So the function will not display anything.

3) For this problem you also need to turn in an algorithm along with your source code and output. Program should continually have user enter a positive integer, and quits on zero entered. This entered number represents the total number of seconds and after each number is entered a procedure is called that displays the time in hours, minutes and seconds. Sample output is as follows:

```
Enter Total Seconds, 0 to quit --> 3604
Time is 1: 00:04
```

The procedure needs only one value parameter and should return nothing back to main. If the minutes or seconds are a one digit number then make sure to display a leading zero as the example above shows.

4) This problem will require you to turn in an algorithm along with your source code and output. Program will have user enter a number between 20 and 50, if number is within this range then the summation of that number up to 50 will be calculated and displayed. So if person enters 35, then the sum of 35+36+37+38+...+50 will be displayed. This problem requires you to use two functions. One will determine if entered number is between 20 and 50 and will return True if this is so otherwise False is returned. The other function will return the sum of those numbers. All read and write statements will be done in the “Main” procedure. The overall program needs to repeat until user enters a 0 to quit. Also if number is out of range, should display appropriate message.