

# CS130/230 Assignment 1

**Date Assigned:** Friday, January 9, 2004

**Date Due:** Monday, January 12, 2004

**Total Points:** 50

For this assignment you should create an Excel file that has two worksheets as follows:

## **Worksheet 1 – name it “Bill Counter”**

You have been asked to help your local parking lot owner to create a worksheet to calculate the total cash collected by the parking attendants.

Create a worksheet where the owner of the parking lot can enter in the number of dollar bills in the various currency denominations (assume that there will be only 1, 5, 10, 20, 50 and 100 dollar bills) and calculates the grand total.

Your worksheet should have three columns containing:

- Bill denomination
- Number of bills
- Total for each denomination

At the bottom of the worksheet display the grand total of the cash.

## **Worksheet 2 – name it “College Fund”**

Your friends have just celebrated the birth of their first daughter and having gone through college themselves, they are aware of how expensive a college education can be. They have asked for you to help them in setting up a college fund.

Their goal is to save \$75,000 by the time their daughter is eighteen. Current interest rates for such funds are 6.5% compounded monthly.

Create a college fund worksheet to allow the user to enter in the:

- Saving goal
- Saving period in years
- Interest rate

You should then display how much money should be paid monthly into the account to reach this goal. Show this as a positive value.

For the next part create a table showing how the money in the savings account will grow over the next eighteen years. Your table should contain column headings for the:

- Payment period (month 1, 2, 3, etc.)
- Beginning balance (how much money is in the account at the start of the month)
- Monthly Interest (interest charged for the month)
- Monthly Payment (how much will be added that month)

- Final balance (beginning balance plus interest plus monthly payment)

Finally, display how much money in total your friends would have to pay into the account to reach their goal and display the total amount of interest they would earn.

I will be doing what-if analysis on your solution. Specifically, I will be changing the interest rate and number of years. For full credit your monthly payment and payment schedule should correctly reflect any changes that I make.

Everything in the worksheet should be right justified and formatted correctly (i.e. currency, percentage, etc) except the text that asks the user to enter in the values.

Once you have completed both worksheets, name your workbook 'your punetid.xls' and place it into the 'CS130 Drop' folder on 'Winter'. Your workbook must be in the drop box by 9am for full credit.