Objectives:

As a programmer, you will be expected to understand good coding practice and logical structures. For this project ***you must show mastery of***:

- Proper code layout
- Variable declaration and initialization
- Constant declaration and initialization
- Collections (arrays)
- Modularization
- Dispatching
- Program sequence and selection
- Cohesion
- Good programming practices

Links:

Helpers: 1, 2, 3,

Rubric

CIS 104 Mid-Term Practice

Mastering code and creating interesting algorithms

Task

http://goldprice.org/Calculators/Gold-Price-Calculators.html

You have been tasked by "Cash for Loot" to write a program which will help customers get an estimate of the amount they will be paid for their precious metals & gems. Customers enter data on the company web site, which will create a proposal for purchasing of the metals from the customer. Below are the program requirements:

Read the entire assignment before proceeding to coding – be sure to follow the implementation notes!

1. The program will begin asking for information about the customer and the metals they have submitted as follows.

a. Customer's last & first name

b. Weight of Gold (gram)

c. Weight of Silver (gram)

d. Karat of gemstone (diamond, sapphire, emerald, ruby)

2. Processing of Data

a. Create a unique 8 digit number to identify the customer.

b. The following conversion rates will be used for calculation of the amount of money offered for each metal the customer has submitted and a total amount:

Gold: $52.00/gram

Silver: $1.10/gram

Diamond: $200.00/.5 Karat

Sapphire: $100.00/.5 Karat

Emerald: $150.00/.5 Karat

Ruby: $1750.00/.5 Karat

c. Asses a 10% handling fee

3. Display the data:

    a. Display the customer's ID

    b. Display the customer's name

    c. Display the amount of money to be offered for each metal

    d. Display the handling fee

    e. Display the net amount of money to be offered to the customer

4. Storing the data

    a. All transactions must be stored for the day.

5. Display a summary of the user's input for all customers as follows:

    a. Total weight for each metal from all customers

    b. Total dollar amount of money to be offered for each metal for all customers

    c. Grand total for all metals for all customers.

OPEN BOOK, OPEN NOTES, OPEN INTERNET!