

Project 3 – Python

Honest Harry owns a used car lot and would like a program to keep track of his sales. Follow good programming practise using Comments, Constants, and Spacing. The program will repeat until the user enters the word “END” for the Customer First Name. The invoice date is the current system date.

Input for the program will be the customer first name (must be entered – adjust to title case), the customer last name (must be entered – adjust to title case), the phone number (must be entered - must be 10 digits), the plate number (must be entered – must be 6 characters - convert to all caps – **BONUS:** entered in the format XXX999), the car make (ie: Toyota), the car model (ie: Corolla), the year (ie: 2018), the selling price (does not exceed \$50,000.00), the amount of the trade in (does not exceed the selling price), and the salespersons name. **NOTE:** Validation is only required on the fields as specified.

The program should calculate the price after trade, the licence fee, the transfer fee, the HST, Subtotal, and the total sales price. The price after trade is the selling price less the trade in amount. The licence fee is standard rate in NL of \$75.00 on cars up to and including \$5,000.00 and \$165.00 on cars over \$5,000.00. The transfer fee 1% of the selling price - if the selling price is more than \$20,000.00, an additional 1.6% luxury tax is calculated on the selling price and added to the transfer fee. The Subtotal is the Price after trade plus the License Fee plus the Transfer Fee. Taxes (HST) are calculated at 15% on the Subtotal. The total sales price is the subtotal plus the HST.

Display results based on the following guidelines: Customer name is the first initial and the last name, the second line is the street address, and the third line is the City, Province and Postal Code. Car Details are the Year, Make and Model – ie: 2014 Toyota Corolla. The program should create a Receipt ID for the sale in the form XX-XXX-XXXX where the first two characters are the customer initials, the middle 3 characters are the last 3 digits in the license plate number, and the final 4 characters are the last 4 digits of the phone number.

The payment schedule uses a loop based on the number of years the customer will use to pay off the car. For each of 4 years, calculate the number of monthly payments (Years * 12), the financing fee at 39.99 per year, the total price as the total sales price plus the financing fee, and the monthly payment (The Total Price divided by the number of months). The first payment date is 30 days from the purchase date.

NOTE : This will allow the user to decide on payment options.

1 2 3 4 5 6 7
12345678901234567890123456789012345678901234567890123456789012345678

Honest Harry Car Sales
Used Car Sale and Receipt

Invoice Date: Month dd, yyyy
Receipt No: XX-XXX-XXXX

Sold to: Sale price: \$99,999.99
Trade Allowance: \$99,999.99

X. XXXXXXXXXXXXXXXXXXXXXXXXXXXX Price after Trade: \$99,999.99
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX License Fee: \$99,999.99
XXXXXXXXXXXXXXXXXXXX, XX XXXXXX Transfer Fee: \$99,999.99

Car Details: Subtotal: \$99,999.99
HST: \$99,999.99
XXXX XXXXXXXXXXXXXXX XXXXXXXXXXXX

Total sales price: \$99,999.99

# Years	# Payments	Financing Fee	Total Price	Monthly Payment
1	12	\$999.99	\$99,999.99	\$9,999.99
2	24	\$999.99	\$99,999.99	\$9,999.99
3	36	\$999.99	\$99,999.99	\$9,999.99
4	48	\$999.99	\$99,999.99	\$9,999.99

Invoice date: dd-MON-yy	First payment date: dd-MON-yy
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Best used cars at the best prices!