

Intro to Python – Lesson 33

Now that we created files with all this wonderful data, what are we going to do with it. I have included a very simple data file called Sales.dat. This includes an Invoice Number, Customer name, Item Cost, HST and Total Cost. Check out the following code that will read each line from the file, process it, and print the results. Do some research and find out what the split() and strip() functions do in this exercise.

```
f = open("Sales.dat", "r")
```

```
for SalesDataLine in f:
```

```
    SalesLine = SalesDataLine.split(",")
```

```
    EmpNum = SalesLine [0]
```

```
    EmpName = SalesLine [1]
```

```
    ItemCost = float(SalesLine[2])
```

```
    HST = float(SalesLine [3])
```

```
    TotalCost = float(SalesLine[4].strip())
```

```
    print(" {} {:<20} ${:,.2f} ${:,.2f} ${:,.2f}".format(EmpNum, EmpName, ItemCost, HST, TotalCost))
```

```
f.close()
```

Add the data file to a new project and write a program that will read each line in the file, assign the values to variables, and print the values as seen from the code above.

Creating Reports

One of the most common reasons to process a file is to generate a report. A report basically takes the data from a file and produces a document that people can use for making decisions. Look at the following example. Reports are made up of heading lines – printed before the loop, detail lines – generated inside a loop as you process each line, and summary lines – normally counters and accumulators and is printed after the loop.

Use the table called Customer.dat to create the following reports. The file contains the Customer Account Number (Text), the Customer Name (Text), the Street Address (Text), the City (Text), the Phone Number (Text), the Balance Due (Float) and the Credit Limit (Float). A sample is below:

```
12345, John Doe, 123 Main St., St. John's, 754-4858, 382.00, 2000.00
12537, Sally Jones, 25 Airport Rd., St. John's, 579-1941, 2345.00, 2000.00
:
:
```

[illegible]

ACCOUNTS RECEIVABLE CUSTOMER LISTING

ACCOUNT NUMBER	CUSTOMER NAME	PHONE NUMBER
XXXXXX	XXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX
	:	
	:	
XXXXXX	XXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX
=====		
TOTAL CUSTOMER LISTED: ##		

[illegible]

ACCOUNTS RECEIVABLE SUMMARY REPORT AS OF MM-DD-YYYY

ACCOUNT NUMBER	CUSTOMER NAME	BALANCE DUE	CREDIT REMAINING	MINIMUM PAYMENT
XXXXXX	XXXXXXXXXXXXXXXXXXXXXX	\$\$,###.##	\$\$,###.##	\$\$,###.##
		:		
		:		
XXXXXX	XXXXXXXXXXXXXXXXXXXXXX	\$\$,###.##	\$\$,###.##	\$\$,###.##
Customers listed: ###		\$\$,###.##		\$\$,###.##

See you at 1.