

## Lab 7

### Five-Babbage Burgers and Fries Inc.

#### *Objective:*

To write a program with:

- a simple menu using char variables and the do-while construct
- a while construct that runs until all employees are paid

#### *Assignment:*

You are going to modify your code from Lab 6 because Five-Babbage Burgers and Fries Inc. employs a variety of people in many different capacities. There are counter workers, managers, cooks and dishwashing staff. Each one has a different salary and compensation package.

- Counter staff are paid at the rate of \$10.50 per hour.
- Kitchen Cooks are paid at the rate of \$15.75 per hour.
- Dishwashers are paid at the rate of \$10.50 per hour.
- Managers are salaried employees that make \$48,000 annually.

Each hourly employee's paycheck has 28% withheld for Uncle Sam and salaried employees have 33% withheld.

Write a program that will loop until all employees in the company have been paid. This means asking the user if they are finished or need to continue. Each time through the loop a menu prompts the user asking what type of employee they are calculating the salary for and, if appropriate, how many hours they worked. The program should then respond with the user's name and take-home pay for the week.

Here is what the menu should look like:

```
What is their role here at Five-Babbage Burgers and Fries Inc.?
```

```
A. Counter Staff  
K. Kitchen Cook  
D. Dishwasher  
M. Manager
```

```
Please choose an option:
```

The user will select **A, K, D or M** and then ask for the number of hours (decimals are allowed) and correctly calculate the paycheck corresponding to the appropriate staff's pay and display it. Name followed by their pay.

If the user enters anything other than one of the above menu options the menu should be shown again until the user enters a valid option.

The program should quit when the user decides there are no more employees to pay

*More on the next page..*

***Hint:***

A while loop should be used to make the program run until you are out of employees to pay. To make the program repeat the menu until the user chooses a valid char-type menu option, use a do-while loop. Then use a nested if-else to decide what to do. For more information on these constructs, consult the Loops, Menus and If\_Else reference documents. You may also find the Variables Input and Output Formatting reference document helpful.

***Sample Run:***

```
Welcome to Five Babbage Burgers and Fries Payroll Calculator!
Do you have an employee to pay? (Y or N ) Y

What is their First Name? Joe
What is their Last Name? Smith

What is their role here at Five-Babbage Burgers and Fries Inc.?

A. Counter Staff
K. Kitchen Cook
D. Dishwasher
M. Manager

Please choose an option: K

Enter number of hours worked: 39.25

Paycheck Information: Joe Smith . . . . . $445.10

Do you have another employee to pay? (Y or N) N

Thanks for using our software, hope you have a wonderful day!
```